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HELMINTHOLOGICAL ABSTRACTS

incorporating
BIBLIOGRAPHY OF HELMINTHOLOGY
For the Year 1945.



IMPERIAL BUREAU OF AGRICULTURAL PARASITOLOGY
(HELMINTHOLOGY)

Winches Farm Drive, Hatfield Road,
St. Albans, England.

October, 1948

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1945

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HELMINTHOLOGICAL ABSTRACTS

INCORPORATING BIBLIOGRAPHY OF HELMINTHOLOGY
FOR THE YEAR 1945.

Vol. XIV, Part 5.

280—Aberdeen Angus. Buenos Aires.

*a. FERNÁNDEZ, J. A., 1945.—“La fenotiazina su uso en veterinaria.” No. 25, pp. 49-50, 53.

281—Acta Dermato-Venereologica.

a. ASTRUP, A., 1945.—“*Uncinaria stenocephala* as a cause of skin disease in man.” 25 (5), 389-392.

282—Acta Medica Orientalia. Jerusalem.

a. BITSCHAI, J., 1945.—“Urinary bilharziasis in Egypt.” 4 (3), 71-78.

283—Actas Dermo-Sifilográficas. Madrid.

*a. ALVAREZ LOVELL & MANTILLA PÉREZ DE AYALA, 1945.—“Un caso de cisticercosis cutánea.” 36, 605-614.

284—Actas de la Sociedad de Cirugía de Madrid.

*a. REMENTERIA, J., 1945.—“Quiste hidatídico subperitoneal con localización en próstata.” 5, 59-65.

285—Air Surgeon's Bulletin.

- a. BURLINGAME, P. L., 1945.—“Parasitologic laboratory of a redistribution station.” 2 (4), 110-111.
- b. MOORE, J. L., 1945.—“Notes on filariasis.” 2 (11), 374-377.
- c. HANSEN, M. F. & BERN, H. A., 1945.—“A roundworm problem in the Philippines.” 2 (11), 377.
- d. ANON, 1945.—“Schistosomiasis japonica.” 2 (11), 379-380.
- e. McEACHERN, G. G. & WINE, M. B., 1945.—“Oriental schistosomiasis—a clinical report.” 2 (11), 381-382.

(285a) At the parasitologic laboratory of Santa Ana Army Base, California, stool specimens were kept in a box built outside the window, screened to allow ventilation and minimize the fly hazard. The methods adopted to facilitate rapid handling of large numbers of specimens daily are outlined.

B.M.S.

286—Almanaque del Ministerio de Agricultura. República Argentina.

- a. CASÓS, G. A., 1945.—“Sinusitis parasitaria y cenurosis cerebral de los ovinos.” 20, 273-278.
- b. REYNOSO, R. H., 1945.—“Parasitosis intestinal en las aves (heterakiasis).” 20, 331-333.
- c. CASAS, M. A., 1945.—“Enfermedades parasitarias observadas en las reses de consumo y su propagador inmediato: el perro.” 20, 363-366.

(286a) Casós gives a general account of parasitic sinusitis (cephalomyiasis) and cerebral coenuriasis in sheep. For the control of the latter (since the trepanning operation is difficult and uneconomic except for valuable breeding animals) he recommends treating dogs carrying the adult Taenia with kamala, areca nut, or pelletierine.

B.G.P.

(286b) Reynoso recommends phenothiazine (0.15 gm. to 0.5 gm. according to size) against Heterakis in fowls. Three repetitions at 10-day intervals are desirable.

B.G.P.

(286c) Casas briefly describes the common parasitic cattle and sheep diseases which are carried by dogs: hydatid, cysticerciasis, and coenuriasis.

B.G.P.

* Titles so marked throughout this number have not been seen in the original.

287—*Amatus Lusitanus. Lisboa.*

- *a. NUNES, M. A., 1945.—“Cisticercose humana. Exame necrópsico de um caso.” 4, 711-721.

288—*American Dairy Goat News.*

- *a. FISHER, J. R., 1945.—“Four years success with phenothiazine.” 6 (12), 6.

289—*American Fur Breeder.*

- a. JACK, J. A., 1945.—“Treatment for internal and external parasites in foxes.” 17 (11), 26-28.

290—*American Hereford Journal.*

- *a. FOSTER, A. O., 1945.—“Parasites of beef cattle; what they are and what to do about them.” 35 (17), 36, 40, 44, 52, 54, 58, 60.

291—*American Journal of Clinical Pathology.*

- a. WELLER, T. H. & DAMMIN, G. J., 1945.—“An improved method of examination of faeces for the diagnosis of intestinal schistosomiasis.” 15 (11), 496-500.

(291a) Weller & Dammin find that the addition of certain wetting agents to the acid solution improves the efficiency of the acid-ether centrifugation technique for the concentration of *Schistosoma mansoni* ova. This addition had no appreciable effect in the case of other helminth ova, and was disadvantageous for *Strongyloides* larvae. 0.6 c.c. of a 10% aqueous solution of Triton NE is added to the acidified faeces in the centrifuge tube [see Helm. Abs., Vol. XIV, No. 71e] and the proportion of *S. mansoni* positives is about doubled. B.G.P.

292—*American Journal of Clinical Pathology. Technical Section.*

- a. GOULD, S. E., 1945.—“A simplified agitating apparatus for digestion of muscle in recovery of trichinæ.” 9 (6), 103-105.

(292a) Gould describes an agitating device to facilitate the digestion of muscle in order to recover any trichina larvae which may be present. This apparatus, constructed around a vacuum-operated windscreen wiper motor, can be adapted for use either in an incubator room or in a water-bath. D.F.

293—*American Journal of Diseases of Children.*

- a. WHITTIER, L., EINHORN, N. H. & MILLER, J. F., 1945.—“Trichuriasis in children. A clinical survey of fifty cases and reports of three cases with heavy infection and striking clinical symptoms.” 70 (5), 289-292.

294—*American Journal of Medical Technology.*

- *a. EARLE, K. M., 1945.—“Laboratory diagnosis of helminthic infections.” 11, 204-214.

295—*American Journal of Ophthalmology.*

- a. SCOTT, J. G., 1945.—“Onchocerciasis. A study of ocular complications in 342 African cases.” 28 (6), 624-635.

(295a) Scott examined 342 Cameroon soldiers for nodules, skin changes and ocular complications of onchocerciasis. Nodules were found on 38.6% of those examined and were situated in 83% cases around the hips; none were found on the head. Lichenification was observed in 5%. Skin snip examinations for microfilariae of 50 soldiers having no nodules showed 49 positive. Ocular complications were as follows: punctate keratitis 17.8%, punctate keratitis with iridocyclitis 7.9%. Microfilariae were present in the anterior chamber in 15% of those with affected eyes and in 4.6% of those with unaffected eyes. The presence of microfilariae in the eyes was well tolerated and the cause of the complications is believed to be a toxin, most probably of filarial but possibly of microfilarial origin. A method is described of removing microfilariae from the aqueous humour for identification. Six cases thus examined showed only microfilariae of *Onchocerca volvulus*. Microfilariae were more common in the eyes of

patients having nodules than in those without nodules. Up to 50 were counted in the anterior chamber; the average number was about 2 or 3. Retrobulbar neuritis (rare), optic atrophy (very rare) and choroiditis (exceptional) were in addition demonstrated in 38 hospital cases.

J.J.C.B.

296—American Journal of Roentgenology and Radium Therapy.

a. HODES, P. J. & KEEFER, G. P., 1945.—“Hookworm disease: a small intestinal study.” 54 (6), 728-742.

(296a) Hookworm was found to produce early changes in the small intestine which could be detected by roentgen examination, which revealed a narrowing of the intestinal lumen and mucosal distortion. In those seriously ill the entire jejunum and portions of the ileum became involved. Shortening and narrowing of the lumen were notable in well developed infestations. Segmental and peristaltic contractions were increased in intensity; “accordion-like” pendulum movements often replaced the normal gentle sway of the small intestine. It is suggested that these intestinal changes were due to a damaged intramural nervous system.

R.T.L.

297—American Midland Naturalist.

a. MORGAN, B. B., 1945.—“The nematode genus *Abbreviata* (Travassos, 1920) Schulz, 1927.” 34 (2), 485-490.
 b. MIZELLE, J. D. & REGENSBERGER, R., 1945.—“Studies on monogenetic trematodes. XII. Dactylogyridae from Wisconsin fishes.” 34 (3), 673-700.

(297a) Morgan gives a parasite-host list, generic diagnosis, and references to the 27 species of physalopteroid nematodes (mainly from reptiles) now included in the genus *Abbreviata*. Travassos made the genus for *Physaloptera abbreviata* and Schulz placed 23 species in it, but no list has hitherto been available in English. B.G.P.

(297b) A survey of the dactylogyrids on the gills of Wisconsin fishes has yielded Mizelle & Regensberger with material for comparative redescriptions and measurements of the following species: *Actinocleidus fergusoni* Mizelle, *Urocleidus acer* (Mueller), *U. dispar* (Mueller) and *U. ferox* Mueller from *Lepomis macrochirus*; *U. helicis* (Mueller) from *L. gibbosus*, and *Cleidodiscus robustus* Mueller from both *Lepomis* spp.; *C. alatus* Mueller, *C. stentor* Mueller, and *U. chautauquensis* (Mueller) from *Ambloplites rupestris*; *C. capax* Mizelle from *Pomoxis nigromaculatus*; *C. aculeatus* (Van Cleave & Mueller) n.comb.—the only tetraonchid on *Stizostedion vitreum*; *A. fusiformis* (Mueller), *A. unguis* Mizelle & Cronin, *U. furcatus* (Mueller) and *U. principals* (Mizelle) from *Huro salmoides*; *C. pricei* Mueller from *Ameiurus nebulosus*; *U. adspectus* Mueller (= *Cleidodiscus* sp. of Mizelle & Donahue, 1944)—the only tetraonchid on *Perca flavescens*; *Tetraonchus monenteron* (Wagener)—the only monogenean on *Esox lucius*; also *Dactylogyrus eucalius* n.sp. from *Eucalia inconstans*—which has cuticular structures resembling various other species, but has an accessory piece unique in form. N.G.S.

298—Anais da Faculdade de Medicina da Bahia.

a. BARROS BARRETO, A. L. C. A. DE, 1945.—“Endemias rurais.” 4 (1944-45), 19-56.
 b. SÁ OLIVEIRA, E. DE, 1945.—“Elefantise e estados elefantinos. (Notas de cirurgia—Bahia, 1941).” 4 (1944-45), 111-151.
 c. FRÓES, H. P., 1945.—“Influência do estado de guerra na evolução dos conhecimentos científicos, no domínio das chamadas doenças tropicais.” 4 (1944-45), 153-171.
 d. GAMA, C. & MARQUES DE SÁ, J., 1945.—“Esquistosomose medular. (Granulomas produzidos por ovos de esquistosoma Mansoni (*Schistosoma mansoni*) comprimindo a medula, epicône, cone, e cauda equina—paraplegia flácida).” 4 (1944-45), 187-251.

(298a) In this report the incidence of schistosomiasis mansoni in various municipalities of the States of Bahia and Minas Gerais is tabulated. R.T.L.

(298b) A number of cases with elephantoid growths are described and illustrated by photographs. R.T.L.

(298d) Schistosomiasis is very widespread in Brazil: in certain localities 98% of the population are affected. It has been estimated that there are 1,000,000 infected persons in the State of Minas Gerais alone. The usual vector is *Australorbis glabratus*. Ova have frequently been found in unusual situations including all parts of the central nervous system. Small granulomata have developed and the patient has then shown symptoms of paraplegia; the degree of infestation corresponds closely with the intensity of the nervous symptoms. A case is described.

P.A.C.

299—Anais da Faculdade de Medicina da Universidade de São Paulo.

a. **AYROZA GALVÃO, A. L., MONTENEGRO FERREIRA, L. & ALOE, R.**, 1945.—“Observações sobre parasitoses intestinais em soldados aquartelados em São Paulo.” 21, 187-203. [English summary p.202.]

(299a) This paper deals mainly with the incidence and associated symptomatology of *Entamoeba histolytica* in 260 soldiers, but in table IV the presence of multiple infections with helminths is recorded.

R.T.L.

300—Anais do Instituto de Medicina Tropical, Lisboa.

a. **PLESSEN, M.**, 1945.—“*Trichocephalus dispar*, um parasita patogénico.” 2, 227-246. [Also in English pp. 247-266.]
 b. **MEIRA, M. T. V. DE, GIRÃO, J. & COITO, A. DE M. F.**, 1945.—“Sobre um foco de anquilostomase rural autóctona em Portugal.” 2, 267-273. [French & English summaries pp. 272-273.]

(300a) Plessen is of the opinion that the presence of *Trichuris trichiura* may cause serious disease symptoms in man. These symptoms consisted of pain, constipation, eructations, various nervous symptoms and indigestion, as well as various other signs. Removal of the worms is not easy but symptoms can often be ameliorated by intravenous calcium, particularly the allergic and nervous symptoms. These observations were made following the examination of 110 carriers of intestinal parasites. Other helminths found were *Heterodera marioni* and *Taenia saginata*.

P.A.C.

(300b) In a country district near Coimbra, where the inhabitants are employed in agriculture, a focus of hookworm infection has been detected. Heretofore hookworm has been reported only from mines in Portugal. Of 158 persons examined 19.6% showed hookworm eggs ranging from 125 to 14,500 per gramme of faeces. Some anaemia also occurred, the haemoglobin ranging from 40% to 74% and the red blood corpuscles from 2,250,000 to 4,230,000.

R.T.L.

301—Anais Paulistas de Medicina e Cirurgia.

*a. **AMARAL, A. D. F. DO & AVILA PIRES, C. D. DE**, 1945.—“Nota sobre a incidencia de verminoses e protozooses entre detentos da Penitenciaria de São Paulo.” 50, 550-554.

302—Anales de la Facultad de Ciencias Médicas. Asunción.

*a. **GONZÁLEZ, G. & MARTÍNEZ, V. M.**, 1945.—“Los pliegues de la mucosa gastroduodenal en la anemia anquilostomósica.” 5 (21), 25-30.

303—Anales de la Facultad de Medicina de Montevideo.

a. **SCHROEDER, A. H.**, 1945.—“Nuevos casos de quiste hidatídico cerebral.” 30 (1/4), 239-256.
 b. **SCHROEDER, A. H. & MEDOC, J.**, 1945.—“Quistes hidáticos del cerebro, corazón y riñón.” 30 (1/4), 257-262.
 c. **LASNIER, E. P. & CASSINELLI, J. F.**, 1945.—“Diagnóstico de quiste hidatídico hialino (no roto) del pulmón mediante la inclusión de esputos.” 30 (12), 903-945.

(303a) Schroeder describes five cases of cerebral hydatid, illustrating his report with very good X-ray photographs.

R.T.L.

304—Anales de la Sociedad Mexicana de Oftalmología y Oto-Rino-Laringología.

a. FONTE BÁRCENA, A., 1945.—“Oncocercosis ocular; ‘síndromes conjuntivales, agudo y crónico, en la oncocercosis de Chiapas’ (los síndromas no individualizados en la oncocercosis ocular de Chiapas).” 20, 1-29.

(304a) [See also below, No. 316b.]

305—Annales de Dermatologie et de Syphiligraphie.

a. FAVRE, M., CUILLERET, P. & GALLET, J., 1945.—“Un cas de vulvite mixte à oxyures et à gonocoques.” [Abstract of a paper presented at a meeting of the Société Française de Dermatologie et Syphiligraphie, April 19, 1945.] 5 (3/4), 102.

306—Annales de l’Institut Agricole et des Services de Recherches et d’Experimentation Agricoles de l’Algérie.

a. ROSE, M., 1945.—“Etude de l’action de la phénothiazine sur la strongylose gastro-intestinale du mouton.” 2 (1), 5-12.

(306a) From a study on six Algerian sheep, seriously affected by gastro-intestinal helminthiasis, Rose concludes that phenothiazine should be given as a minimum dose of 25 gm., while 30 gm. produces lasting increase in weight. Treatment should be given in spring.

R.T.L.

307—Annals of Internal Medicine.

a. LEED, W. E. & JOSEY, A. I., 1945.—“The early diagnosis of filariasis and certain suggestions relative to cause of symptoms.” 23 (5), 816-822.
 b. GOODMAN, A. A., WEINBERGER, E. M., LIPPINCOTT, S. W., MARBLE, A. & WRIGHT, W. H., 1945.—“Studies of filariasis in soldiers evacuated from the South Pacific.” 23 (5), 823-836.

(307a) The clinical symptoms in 100 cases of early filariasis, contracted by American troops in the South Pacific Islands, resembled those already frequently reported. It is suggested that the symptoms, and possibly the physical signs, are due to an allergic response of tissues sensitized to a circulating filarial antigen.

R.T.L.

(307b) Goodman et al. have examined a series of suspected filariasis cases, making particular use of intracutaneous and complement-fixation tests. Antigens were made from *Dirofilaria immitis* and *Setaria equina*. In direct intracutaneous tests, blebs were made with antigen and with control materials, i.e. dog or horse protein. The result was considered positive if a pseudopodial wheal surrounded by a zone of erythema of suitable size formed within 20 minutes. Sites were examined for a delayed reaction after 24 hours. Passive transfer tests were made by the accepted Prausnitz & Küstner technique. Direct intracutaneous tests in 1 : 8,000 dilution gave 59% positive results among the suspects and 6% positive among the controls. Among patients tested with an antigen made from *Litomosoides carinii* there were 77% positive results. Positive results were fewer in passive transfer tests—29% being positive with 1 : 8,000 dilution while *L. carinii* antigen in a dilution of 1 : 200 gave 46% positives. Results with complement-fixation tests were less satisfactory, for though 66% of the suspected cases gave a positive result, so did 25% of the controls. There were the usual symptoms suggestive of filariasis, usually in a mild form. There was no elephantiasis or chyluria. Eosinophilia was often present but microfilariae were only demonstrated twice. No nematode remains were found on excision of lymph nodes and only rather doubtful evidence was seen in roentgenograms.

P.A.C.

308—Annals and Magazine of Natural History.

a. BAYLIS, H. A., 1945.—“Helminths from the American cotton-rat (*Sigmodon hispidus*).” Ser. XI, 12 (87), 189-195.

(308a) Eight species of helminths were collected from cotton rats (*Sigmodon hispidus*) wild-caught in the southern United States and examined in England. Of these 5 were nematodes, viz., *Litomosoides carinii*, *Physaloptera* (?) *bispiculata*, *Longistriata adunca*, *Trichostyngylus sigmodontis* n.sp. and *Strongyloides* sp. *T. sigmodontis* has so many resemblances,

however, to *T. ransomi* that the author feels that it may ultimately prove to be the same species. The 3 tapeworms found were *Schizotaenia sigmodontis*, *Raillietina (R.) bakeri* and *Cysticercus fasciolaris*.

R.T.L.

309—Annals of the New York Academy of Sciences.

a. RATCLIFFE, H. L., 1945.—“Infectious diseases of laboratory animals.” 46, 77-96.

(309a) The author states that laboratory animals are not frequently infected with cestodes or nematodes but points out that any one of the three hookworms which occur in dogs may interfere with experiments. *Strongyloides stercoralis* may occur in dogs, cats and monkeys and be associated with diarrhoea. Monkeys are also parasitized by species of *Oesophagostomum*—these produce nodules which may result in death from perforation of the colon.

R.T.L.

310—Antiseptic. Madras.

a. DEBSARMA, D. N., 1945.—“Ascariasis (1 case note).” 42 (9), 518.

b. PACHECO de FIGUEIREDO, J. M., 1945.—“The food deficiency and intestinal parasitosis (Anquilostoma and Amoeba) in the aetiology of the duodenal ulcer.” 42 (10), 561-565.

c. MISHRA, S., 1945.—“A case of round-worms complicated with malaria.” 42 (12), 735-736.

(310b) As a result of a study of eight cases of duodenal ulcer, the author is of opinion that hookworm should be added to the list of recognized causes of this lesion.

R.T.L.

311—Archives de l’Institut Pasteur du Maroc.

a. JOYEUX, C. & GAUD, J., 1945.—“Recherches helminthologiques marocaines.” 3 (4), 111-143.

(311a) In this article Joyeux & Gaud give short accounts of 9 (8 adult and one larval) trematodes, 21 (19 adult and 2 larval) cestodes, and one acanthocephalan collected in Morocco. The parasites are also listed under their respective vertebrate hosts. None are new.

R.T.L.

312—Archives des Maladies de l’Appareil Digestif et des Maladies de la Nutrition.

a. CHAPUY, A., NAUDIN & GALLAVARDIN, L., 1945.—“Un curieux aspect radiographique d’ascariose duodénale.” 34 (7/9), 236-238.

b. GOIFFON, R., 1945.—“Nécessité d’un régime sans résidus pour la recherche des œufs et de kystes de parasites intestinaux.” 34 (10/12), 341-342.

(312b) Goiffon recommends that, where possible, patients should be kept for three days on a diet without residue and should then be given a mild oil-free laxative before examination of the faeces for helminth ova and protozoan cysts. Under such conditions, the whole of the residue of a centrifuge tube is barely visible and may be transferred to a single slide and examined without difficulty, and with an increase in the accuracy of the findings.

E.M.S.

313—Archives of Pathology.

a. ASHBURN, L. L., PERRIN, T. L., BRADY, F. J. & LAWTON, A. H., 1945.—“Histologic changes in ovary and uterus of live *Dirofilaria immitis* recovered from dogs treated with trivalent antimony compounds.” 40 (5), 334-339.

(313a) Temporary sterilization of the females of *Dirofilaria immitis* can be effected by using a number of trivalent antimony preparations. The worms from two of the 25 infected dogs treated showed this effect even 104 and 107 days after treatment. There was an absence of microfilariae in the genital tract, and degenerative changes and necrosis in the ova and ovaries.

R.T.L.

314—Archivos Argentinos de Enfermedades del Aparato Digestivo y de la Nutrición.

*a. CISNEROS, A. D. & PASQUALIS, E. E., 1945.—“*Necator americanus*; su hallazgo por sondeo duodenal en un caso de anemia secundaria.” 20, 256-266.

315—Archivos Argentinos de Pediatría.

a. SEGERS, A., GINASTERA, M. F. & TOCE, A., 1945.—“Ascaridiosis múltiple.” **24** (4), 279-281.

316—Archivos de la Asociación para Evitar la Ceguera en México.

*a. SÁENZ CANALES, J., 1945.—“Movilidad del cisticero intraocular.” **3**, 31-46.
 *b. FONTE BÁRCENA, A., 1945.—“Oncocercosis ocular; ‘síndromes conjuntivales, agudo y crónico, en la oncocercosis de Chiapas’ (los síndromas no individualizados en la oncocercosis ocular de Chiapas).” **3**, 49-77.

(316b) [See also above, No. 304a.]

317—Archivos Españoles de Urología.

a. HERAS MONTERO, M., 1945.—“Quiste hidatídico de riñón en niña de dieciséis meses, extirpado por nefrectomía.” **2** (2), 153-160.

318—Archivos de la Sociedad de Cirujanos de Hospital. Santiago de Chile.

*a. WILHELM G., O., 1945.—“Equinococosis unilocular secundaria.” **15**, 415-417.
 *b. CABRERA, D. & SAID Y, A., 1945.—“Cirugía de los quistes hidatídicos del pulmón.” **15**, 469-474.
 *c. BAHR S., J., 1945.—“Quistes hidatídicos pulmonares.” **15**, 749-754.

319—Archivos de la Sociedad Oftalmológica Hispano-Americanana. Madrid.

*a. ARUMI, J., 1945.—“Cisticero subconjuntival.” **5**, 339-345.

320—Archivos Uruguayos de Medicina, Cirugía y Especialidades.

a. ARMAND UGON, V., VICTORICA, A. & SUÁREZ, H., 1945.—“Equinococosis pleural secundaria.” **27** (5), 538-555.
 b. MAISONNAVE, A. D., 1945.—“Equinococosis pleural secundaria. Un caso de neumo-pio-hidatotórax.” **27** (5), 556-564.
 c. ARIAS BELLINI, M., 1945.—“Hidatidosis ósea—aspectos radiológicos.” **27** (6), 626-634. [English summary p. 633.]
 d. GRAÑA, A., 1945.—“El diagnóstico biológico de la hidatidosis.” **27** (6), 667-670.

(320d) [See also below, No. 339a.]

321—Arquivos de Cirurgia Clínica e Experimental.

*a. VEIGA PICANCO, T., 1945.—“Sobre a associação de cisto hidatídico e cancer do fígado.” **9**, 49-59.

322—Arquivos do Instituto Penido Burnier.

*a. SOUZA QUEIROZ, L. DE, 1945.—“Cisticerco ocular.” **7**, 129-150.

323—Arquivos do Instituto Químico-Biológico do Estado de Minas Gerais.

a. VERSIANI, V., VIANA MARTINS, A. & PENA SOBRINHO, O., 1945.—“Esquistosomose mansônica no Estado de Minas Gerais. I. Município de Belo Horizonte.” **1**, 71-90. [English summary p. 88.]

(323a) 12.5% of 2,352 school children between 7 and 15 years of age in Belo Horizonte, capital of the State of Minas Gerais in Brazil, harboured *Schistosoma mansoni*. These cases were largely among boys of the poorer classes living along the streams in the suburbs and outskirts of the town. R.T.L.

324—Arquivos do Museu Paranaense.

a. VANNUCCI MENDES, M., 1945.—“Sobre a larva de *Dibothriorhynchus dinoi*, sp.n. parasita dos Rhizostomata (Cest. Tetrarhynchidea).” **4** (1944-45), 47-82. [English summary pp. 75-76.]

(324a) Medusae (*Stomolophus meleagris* and *Lychnorhiza* sp.), on the coast of Brazil, appear to act as intermediate hosts of *Dibothriorhynchus dinoi* n.sp., a tetrarhynchid cestode.

The larvae, which developed beyond the procercoid stage, are described. They approach in structure those of *D. sphyraenaeicus* but differ in the place of origin of the retractor muscles and in the structure of the bothridia, as well as in certain less important details. Vannucci Mendes suggests that the procercoid stage may develop in a copepod or directly in the plankton. Basking sharks may be the definitive host as they are known to feed on medusae.

P.A.C.

325—Arquivos de Neuro-Psiquiatria. São Paulo.

a. GAMA, C. & MARQUES DE SÁ, J., 1945.—“Esquistosomose medular. Granulomas produzidos por ovos de *Schistosoma mansoni* comprimindo a medula, epicone, cone e cauda eqüina.” 3 (4), 334-346. [English summary p. 346.]

326—Auk.

a. PREBLE, N. A., 1945.—“Notes on the duck hawk in Ashland County, Ohio.” 62 (3), 456.

(326a) A duck hawk, *Falco peregrinus anatum*, shot at Ashland, Ohio, contained an immature strigeid, 6 *Cladotaenia foxi*, and 8 *Synhimantus laticeps* which has not hitherto been reported from the Western Hemisphere.

R.T.L.

327—Australian and New Zealand Journal of Surgery.

a. FITZPATRICK, S. C., 1945.—“The surgical approach to hydatid cysts of the right dome of the liver.” 14 (4), 269-270.

(327a) The “boomerang-shaped” incision, which is most generally used in operating on the right dome of the liver for hydatid, is described. An illustrated account is appended of a suction trocar cannula which enables the operator to draw off hydatid fluid under pressure without this being spilled.

R.T.L.

328—Begonian. Long Beach, California.

a. KNECHT, W. J., 1945.—“Pest trouble with gloxinias and begonias. I.” 12 (6), 104-106.

329—Biodynamica.

a. VON BRAND, T., 1945.—“On the origin of anaerobiosis and of endoparasitism in invertebrates.” 5 (105), 353-366.

(329a) Von Brand critically reviews the arguments which have been put forward on the origin of anaerobiosis. The idea that intestinal worms are derived from anaerobic mud-inhabiting ancestors does not seem to be well founded save possibly in the case of intestinal nematodes. There is no experimental evidence that the migrations of the larvae of certain nematodes within the bodies of their vertebrate hosts are correlated with the necessity of leading an anaerobic life in the intestine.

R.T.L.

330—Biología Médica. Niterói.

a. MACHADO, O., 1945.—“Os mamíferos domésticos e silvestres como reservatórios de doenças humanas.” Ano VIII, 3 (2), 65-72.

(330a) Machado considers the role of various domestic and wild animals as reservoir hosts of certain human diseases. At the end of the article he mentions that he has found *Ascaris lumbricoides* in armadillos, and *Ancylostoma caninum* among pigs in Brazil. The bulk of the article deals with diseases caused by agents other than helminths.

P.A.C.

331—Biológico. São Paulo.

a. DRUMMOND-GONÇALVES, R., 1945.—“Nódulos das raízes (Heterodera) da figueira.” 11 (9), 255.

b. MELLO, M. J. DE & CUOCOLO SOBR., R., 1945.—“Principais cestóides do homem e dos animais domésticos.” 11 (11), 279-294.

(331a) In Brazil, figs attacked by *Heterodera marioni* do not suffer greatly if well cultivated, since new roots replace those attacked. Drummond-Gonçalves recommends interplanting with the non-susceptible leguminous *Crotalaria spectabilis*, which is then turned in as a green manure, and dressing with quenched lime at the rate of 0.5 kg. per plant. B.G.P.

(331b) Mello & Cuoccolo give a brief account of the structure, life-history, and control of the commoner cestodes of man and the domesticated animals. B.G.P.

332—Biologie Médicale.

a. JOYEUX, C., 1945.—“L'adaptation des parasites animaux à l'homme.” (1944-45), 34 (7/9), 108-136.

(332a) Joyeux summarizes the literature of helminth and other parasites which occur both in man and in other animals. R.T.L.

333—Boletim do Sanatório São Lucas.

*a. SALDANHA FARIA, J., 1945.—“Perfuração do apêndice por áscaris.” 7, 3-6.

334—Boletín de la Asociación Médica de Puerto Rico.

a. PRATT, C. K., 1945.—“The use of adrenalin in acute tropical lymphangitis or elephantiasis.” 37 (10), 412-413.

335—Boletín de la Estación Experimental Agrícola de Tucumán.

a. SCHULTZ, E. F., 1945.—“Algunas observaciones sobre la podredumbre de las raicillas del naranjo agrio injertado.” No. 54, 22 pp.

(335a) Schultz gives an account of his recent observations on a rootlet rot of grafted sour orange trees which has been known for some years in Argentina. One of the possible causes of this is the eelworm, *Tylenchulus semi-penetrans* Cobb, and the author devotes one section of his paper to a consideration of this parasite which, however, he apparently does not regard as the main cause since it can be found in considerable numbers on the roots of healthy orange trees. T.G.

336—Boletín del Instituto de Clínica Quirúrgica. Universidad de Buenos Aires.

a. BADO, J. L., 1945.—“Apuntes sobre equinococosis ósea.” 21 (172), 209-220.

337—Boletín Médico del Hospital Infantil. México.

*a. ROBLES, C., 1945.—“Consideraciones acerca de la cisticercosis cerebral en los niños.” 2, 193-204.
*b. NAVA URIZA, E., 1945.—“Ascaridiosis múltiple en un niño de tres años.” 2, 249-251.

(337a) [See also below, No. 389c.]

338—Boletín Mensual. Dirección de Ganadería, Montevideo.

a. CASSAMAGNAGHI, JR., A., 1945.—“Dos especies de *Capillaria* (*Trichosomum*), parasitando el tubo digestivo superior de patos y gallinas.” 28 (3), 237-249.
b. CALZADA, V. & SZYFRES, B., 1945.—“Comprobación de un caso autóctono de diocotifosis en el Uruguay.” 28 (4), 316-322.

(338a) Cassamagnaghi describes the structure and pathological action of *Capillaria annulata* and *C. contorta*, species which occur in ducks and fowls in Uruguay. P.A.C.

339—Boletín de la Sociedad de Cirugía del Uruguay.

*a. GRAÑA, A., 1945.—“El diagnóstico biológico de la hidatidosis.” 16, 213-216.
*b. SUIFFET, W. R., 1945.—“Peritonitis biliohidática aguda (coleperitoneo y coleperitonitis hidática aguda).” 16, 299-309.
*c. PRAT, D., 1945.—“Sobre cólico hepático seudo litiasico o cólico hepático hidatídico.” 16 (9/10), 453-462.
*d. GRAÑA, A. & GAUDIANO, P., 1945.—“El mecanismo de la seudolitiasis biliar de origen hidatídico.” 16 (11/12), 516-525.

(339a) [See also above, No. 320d.]

340—Boletín de la Universidad de Granada.

a. LÓPEZ-NEYRA, C. R., 1945.—“La evolución de la helmintología a través de los siglos.” 17 (79), 361-378.

341—Boletines de la Sociedad de Cirugía de Rosario.

*a. MAROTTOLI, O. R., 1945.—“Sobre un caso de hidatidosis del fémur.” 12, 55-60.

342—Boletines y Trabajos. Academia Argentina de Cirugía.

*a. GOÑI MORENO, I., 1945.—“Quiste hidatídico del pulmón; operación de Posadas.” 29, 74-77.
 *b. CALCAGNO, B. N., 1945.—“Hidatidosis abdominal múltiple.” 29, 599-600.
 *c. MICHANS, J. R., 1945.—“Migración transdiafragmática de un quiste hidatídico calcificado del hígado.” 29, 617-632.
 *d. CALCAGNO, B. N., BREA, M. M. & ARCE, J., 1945.—“Migración transdiafragmática de un quiste hidatídico calcificado del hígado.” 29, 649-657.
 *e. ARCE, J., 1945.—“Fistula bilio-bronco cutánea; quiste hidatídico del hígado abierto en los bronquios.” 29, 658-666.
 *f. CALCAGNO, B. N., 1945.—“Equinococosis hepática. Terapéutica biológica.” 29, 837-841.
 *g. PAGLIÈRE, L. A., 1945.—“Sobre tratamiento de los quistes hidáticos por la punción evacuadora y su biopathología.” 29, 924.

343—Brasil-Médico.

a. PINTO VIÉGAS, A., ALVES DE MORAIS, P. & MOREIRA, O., 1945.—“Charcot-Leyden, muco e infestação intestinal.” 59 (46/47), 397.

(343a) Though Charcot-Leyden crystals in faeces have usually been considered to be an index of intestinal infestation, Pinto Viégas et al. show that they cannot be so considered. A large number of stools was examined: many showed crystals and no parasites, while some stools with parasites had no crystals.

P.A.C.

344—British Journal of Ophthalmology.

a. SEN, K. & GHOSE, N., 1945.—“Ocular gnathostomiasis.” 29 (12), 618-626.

(344a) Infection with *Gnathostoma spinigerum*, although common in cats in the Middle East, is rare in man and usually occurs in superficial abscesses. Sen & Ghose now report a case from Northern Bengal in a Brahmin who suffered from orbital cellulitis with haemorrhages in the retina and the vitreous of his left eye. On examination a worm was seen through the hazy cornea. The operation for its removal from the anterior chamber of the eye is detailed. The specimen measured 3.5 mm. in length. There were 4 rows of spines on the head. R.T.L.

345—British Journal of Radiology.

a. SHORVON, L. M., 1945.—“Pulmonary metastases from tumours of the testis simulating hydatid cysts radiologically.” 18 (215), 363-364.

346—British Journal of Venereal Diseases.

a. WILLCOX, R. R., 1945.—“Genital oedema in relation to filariasis in the Gold Coast.” 21 (4), 178-179.

347—Bulletin de l'Académie de Médecine. Paris.

a. LAVIER, G., 1945.—“Les phénomènes d'immunité dans l'éosinophilie des helminthiases.” 129 (30/32), 560-561.

(347a) Lavier has evidence that reinfection with a helminth species produces eosinophilia in the host, though the peak is always lower than that which follows a first infestation. Two theories can be put forward to account for this. The first, which is not wholly satisfactory, is that the helminth species ceases to produce immune bodies after a time in the host body; a new infestation, therefore, produces new immune bodies which cause the development of eosinophilia. The second theory, which is more satisfactory, is that the production of

immune bodies by the parasite occurs constantly but that the host ceases to react unless an increase in the amount of immune body occurs. When this occurs, as in reinfection, an eosinophilia is again apparent.

P.A.C.

348—Bulletin de l'Académie des Sciences de l'URSS. Série Biologique.

- a. VINITSKY, I. M., 1945.—[Ascaridial intoxication and antitoxic ascaridial immunity.] 1945 (4), 439-451. [In Russian : English summary pp. 450-451.]
- b. VINITSKY, I. M., 1945.—[The humoral and immunobiological reactivity of experimental animals against live ascarids operatively introduced into the peritoneal cavity.] 1945 (4), 452-459. [In Russian : English summary pp. 458-459.]

(348a) Introduction of dead ascaris or of the body fluid of ascaris into guinea-pigs caused collapse and death in 14 to 21 hours. The capillaries were dilated and haemorrhage resulted. Ascaris apparently contains an anti-coagulating factor ; there is also a toxin acting on the central nervous system. Previous introduction of live ascaris was followed by the production of antibodies which prevented collapse and fatal results. Serum from immunized animals was also a protection but immunity produced by this means was only temporary. P.A.C.

(348b) Living ascarids were introduced into the peritoneal cavity of guinea-pigs, rabbits, dogs, cats and hens so that the formation of specific antibodies could be studied. The precipitation reaction became positive in rabbits on the 23rd day when phagocytosis was at its height. In carnivores the ascarids undergo lysis very rapidly and specific antibodies can be demonstrated on the 6th day while complement is fixed by the 8th day. The antibodies soon disappear from the plasma after complete lysis of the worms which occurs after not more than 11 days ; but they have become fixed in the cells, as can be demonstrated by the production of anaphylactic shock following the introduction of another live worm into the peritoneal cavity. Antibodies disappear rapidly from rabbits as the parasite becomes surrounded by a necrotic structureless wall followed later by granulation and fibrous tissue. No specific reaction occurs in hens in which the parasites simply mummify.

P.A.C.

349—Bulletin de l'Académie Vétérinaire de France.

- a. GUILHON, J. & POUGET, J., 1945.—“Essais de traitement de la gastro-entérite vermineuse du mouton et de la chèvre par la thiadiphénylamine.” 18, 47-57.
- b. GUILHON, J., 1945.—“Traitement du parasitisme intestinal des oiseaux par la thiadiphénylamine.” 18, 101-111.

(349a) Thiodiphenylamine (phenothiazine) is almost non-toxic to sheep and goats. In the case of slight parasitism doses of 20 to 30 cg. per kg. body-weight, repeated on 2 or 3 successive days, give excellent results : the helminth eggs generally disappear from the faeces within 12 days and the sheep regain weight, but with smaller doses the effects are very irregular.

R.T.L.

(349b) Thiodiphenylamine (phenothiazine) is practically devoid of toxicity in birds and has a wider range of therapeutic use than in mammals. 50 cg. per kg. live-weight on 3 to 5 consecutive days gives excellent results in helminth infections of mild or medium severity : the birds are generally freed from their parasites in 5 to 6 days. In cases of massive infections, as in pigeons with 200 to 500 Ascaridia, it is necessary to use doses of 65 cg. or even of 1 gm. per kg. live-weight on at least 3 successive days, while in massive Capillaria infections it is necessary to give large doses for 5 days and repeat these 15 days later. Turkeys attacked by *Histomonas* require doses of 50 cg. per kg. live-weight for 5 successive days. In avian taeniasis good results follow dosing with 50 cg. up to 1 gm. per kg. live-weight for 5 successive days.

R.T.L.

350—Bulletin of the Department of Agriculture, California.

- a. HARRIS, M. R. & CARTER, W. B., 1945.—“Methyl bromide as a soil nematocide” 34 (2), 84-88.

(350a) Harris & Carter give an account of experiments in which soil, known to be infested with *Heterodera marioni*, was fumigated after being placed in disused lubricating oil

cans which were piled one on top of another but with holes knocked into the bottoms so that the fumigant could pass from one to another. The junction of can with can was sealed with adhesive tape, and the fumigant (methyl bromide) was placed in a small bottle secured in a tightly fitting cardboard lid of the topmost can. By removing the cork of the bottle the fumigant was set free. It was found that nematodes were killed throughout the 60-in. column of soil when a dosage of 2 c.c. per cubic foot of soil was applied.

T.G.

351—Bulletin. Kansas Agricultural Experiment Station.

a. BUSHNELL, L. D. & TWIEHAUS, M. J., 1945.—“Poultry diseases, their prevention and control.” No. 326, 124 pp. [Revision of Bull. No. 284.]

(351a) Bushnell & Twiehaus have produced a new edition of the bulletin dealing with poultry diseases. In the section dealing with helminth parasites they describe the conditions associated with *Oxyspirura mansoni*, *Syngamus trachea*, *Capillaria* spp., gizzard worms, *Dispharynx spiralis*, *Tetramerites americana*, *Ascaridia galli*, *Heterakis gallinae*, the more common cestodes, and *Collyriculum* sp. Symptoms and methods of control are outlined.

P.A.C.

352—Bulletin of the New York Academy of Medicine.

a. GOULD, S. E., 1945.—“Trichinosis: a major health problem in the United States. What shall be done about it?” 21 (11), 616-624.

(352a) After summarizing the history of trichinosis, its symptoms, diagnosis, incidence in the U.S.A., medico-legal aspects and the control measures hitherto recommended, Gould believes that the most practical method of control in the U.S.A. is by legally requiring the processing of all pork.

R.T.L.

353—Bulletin der Schweizerischen Akademie der Medizinischen Wissenschaften.

*a. HENSCHEN, C. & BIRCHER, R., 1945.—“Zur Epidemiologie, Pathologie und Chirurgie des Echinococcus alveolaris.” 1 (4), 209-224.

(353a) The authors differentiate as two distinct species *Taenia echinococcus alveolaris* and *T. echinococcus hydatidosus*. While the former is endemic in Switzerland the latter is said to be cosmopolitan. Their differential diagnosis is based on host reactions. [From an abstract in Biol. Abstr., 20, No. 18915.]

R.T.L.

354—Bulletin de la Société Belge d’Ophtalmologie.

a. WESEMAEL, VAN, 1945.—“Papille de stase bilatérale chez un jeune homme atteint d’ascariasis et guéri par un médicament antiparasitaire.” No. 81, pp. 40-43.

355—Bulletin de la Société Entomologique de France.

a. DOLLFUS, R. P., 1945.—“Présence en France d’*Allomermis myrmecophila* (H. A. Baylis, 1921) chez la fourmi *Lasius alienus* Förster.” 50 (8), 102-105.

(355a) Dollfus gives a brief illustrated description of *Allomermis myrmecophila* (Baylis) based on 3 larvae which came from an ant, *Lasius alienus* Förster, collected in the vicinity of Montbrizon (Loire), France.

T.G.

356—Bulletin de la Société Neuchâteloise des Sciences Naturelles.

a. DUBOIS, G., 1945.—“A propos de la spécificité parasitaire des Strigeida.” Année 1944, 69, 5-103.
b. BAER, J. G., 1945.—“Contribution à l’étude expérimentale des cycles évolutifs des cestodes.” Année 1944, 69, 181-183.

(356a) In his 1938 monograph on the Strigeida [see Helm. Abs., Vol. VII, No. 224a], Dubois left for more detailed discussion the complex questions of host specificity in this group. He now returns to the subject at some length. Part I deals with the adaptation of strigeids to their hosts and shows, e.g., that certain orders of birds tend to be parasitized by certain families

(or lower groups) of trematode, though the scheme is not rigid. Part 2 discusses the classification of the group from a dynamic, phylogenetic aspect. The new forms included are: *Neodiplostomum calaophilum* n.sp. (for *N. cochleare* Verma); the following new genera: *Didelphodiplostomum*, *Theriodiplostomum*, *Enhydridiplostomum*, and *Pseudoglossodiplostomum*; and the following new names of higher rank: *Brachylaemida* (supersuperfam.), *Strigeoinae* and *Clinostomoinae* (sub-tribes), *Strigeidae* and *Schistosomatidae* (tribes). B.G.P.

(356b) This is an account of a lecture illustrated by lantern slides, given by Baer to the Société Neuchâteloise des Sciences Naturelles, in which he reviewed the various types of cestode life-history. He apparently also showed slides of a new type of larvae recently described by himself in conjunction with Prof. Joyeux [see Helm. Abs., Vol. XIII, No. 494a]. This larva occurs in acarine mites and the scolex differs in certain respects from that of the adult worm which lives in mice. P.A.C.

357—Bulletin de la Société de Pathologie Exotique.

a. HEIM DE BALSAC, H., 1945.—“Faits intéressants la pathologie et l'hygiène dans l'extrême Sud Marocain.” 38 (1/2), 8.

(357a) Numerous foci of bilharziasis were observed in the valley of the Draa in South Morocco. No details are given. R.T.L.

358—Bulletin. Tea Research Institute of Ceylon.

a. GADD, C. H., 1945.—“Report of the mycologist for 1944.” No. 26, pp. 23-30.

(358a) Gadd reports on an experiment set up to test the susceptibility of tea roots to the eelworm, *Anguillulina pratensis*, previous experience having suggested that some tea plants are more susceptible to attack than others. Thirty tea seedlings were planted in 12-in. pots and the soil of 15 of these was lightly inoculated with adults of *A. pratensis*; the other 15 were left uninoculated as controls. After two years it was possible to distinguish at sight most, but not all, of the infested pots because of the generally poorer appearance of the plants. The roots of plants from uninoculated pots were abundant, fine and white whereas those from infested pots varied from very poor (in the case of 4 moribund plants) to more or less abundant white roots. In no case were these roots as abundant or as fine as those from uninoculated controls. No tea seedling was entirely resistant to eelworm attack but some were much more resistant than others. A number of other plants, including weeds and green manure plants, were tested for susceptibility to *A. pratensis* from tea but none was found to be so susceptible as tea itself as judged by the number of nematodes extracted from their roots. T.G.

359—Bulletin of the United States Army Medical Department.

- a. ANON, 1945.—“Schistosomiasis in the Orient.” No. 86, pp. 23-24.
- b. ANON, 1945.—“Schistosomiasis japonica.” [Abstract.] 4 (3), 273-276.
- c. ANON, 1945.—“Filariasis (*Wuchereria*) with special reference to early stages.” [Abstract.] 4 (3), 294-296.
- d. LIEBOW, A. A. & HANNUM, C. A., 1945.—“Hookworm infection in South Pacific area.” [Abstract.] 4 (4), 372-373.
- e. SULLIVAN, R. R. & FERGUSON, M. S., 1945.—“Epidemiological study of schistosomiasis japonica.” [Abstract.] 4 (5), 491.
- f. TILLMAN, A. J. B., 1945.—“Cerebral manifestations of schistosomiasis japonica.” 4 (5), 492.
- g. ANON, 1945.—“Quantitative methods for the evaluation of hookworm infections.” 4 (6), 621-622.
- h. ANON, 1945.—“Avoidance of trematode infections in the Orient.” 4 (6), 622.
- i. ANON, 1945.—“The management of hookworm infection.” 4 (6), 660-661.

(359a) Of faecal specimens collected at random from 100 civilians in the Dulag-Palo-Tacloban sector of Leyte, Philippine Islands, 34% were positive for *Schistosoma japonicum*. *Schistosomophora hydrobiopsis* is the common intermediary there. While mobile sand filters are not protective the newly standardized diatomaceous earth filter of the U.S. Services is effective in removing all cercariae from water. R.T.L.

(359d) Hookworm infection was acquired by U.S. servicemen in the South Pacific area largely during combat and was increased among those occupying native villages and enemy bivouac areas. *Ancylostoma duodenale* was the more common species met with, indicating that the source of infection was soil contaminated by natives or by Japanese. A biologic cure was effected only in 50% of the patients who received a single treatment with tetrachlorethylene.

R.T.L.

(359e) Sullivan & Ferguson report that 71% to 89% of platoons of a U.S.A. combat engineering battalion engaged in bridge construction and repair in Leyte became infected with schistosomiasis. Rubber boots or other protective equipment is recommended for those engaged on work of this nature. Failure to find the intermediate host, *Oncomelania quadrasi*, is no criterion of the safety of the streams.

R.T.L.

(359f) An official report by Tillman is cited in which 7 instances of early Schistosomiasis japonica with severe cerebral disturbances, confusion, disorientation, memory defects, aphasia and hyper-reflexia are attributed to the deposition of schistosome eggs in the central nervous system.

R.T.L.

(359g) The retreatment of cases of hookworm is scarcely warranted unless the number of worms remaining is over 25. The degree of residual infection may be estimated by using the Stoll egg-counting technique.

R.T.L.

(359h) As certain freshwater fish, crabs, crayfish and certain edible water plants are vectors of trematode diseases in the Orient, these should be avoided unless thoroughly cooked. It is pointed out that certain "native delicacies" may contain raw flesh of freshwater crabs, crayfish and fishes.

R.T.L.

(359i) A large majority of the hookworm cases acquired by the U.S. Service personnel harboured only light infections. In these cases 2 anthelmintic treatments with tetrachlorethylene was the army procedure. Iron was not ordered unless anaemia was present.

R.T.L.

360—Bulletin de l'Université d'État de l'Asie Centrale, Tashkent.

- BRODSKII, A. L. & ZEMLYANSKAYA, A. I., 1945.—[New methods for controlling the root-knot nematode, *Heterodera marioni*.] 23, 144-145. [In Russian.]
- BELYAEVA, K. V., 1945.—[Nematodes of soil and plants in irrigated zones (Tashkent oasis).] 23, 146-147. [In Russian.]
- SAMADOV, K. S., 1945.—[Biology of the lancet fluke, *Dicrocoelium lanceatum*.] 23, 150-152. [In Russian.]
- SULMANOV, M. A., 1945.—[Nematode fauna of birds of prey in the Tashkent region.] 23, 152-154. [In Russian.]
- TULYAGANOV, A. & ABDULIN, B. R., 1945.—[Action of catalytic fertilizers (trace elements) on the nematode fauna of rice.] 23, 154-155. [In Russian.]

(360d) Sulmanov reports, without descriptions, *Porrocaecum skrjabini* n.sp. from the griffon-vulture, *Cyathostoma brodskii* n.sp. and *Microtetramerus gubernaculiferens* n.sp. from the bald marsh kite, and *Dispharynx noctuae uzbekistanica* n.subsp. from an owl.

E.M.S.

361—California Cultivator.

- WINSLOW, M. M., 1945.—"The meadow nematode." 92 (3), 61.
- KLEIN, J., 1945.—"Livestock disease control." 92, 225, 234-235.

(361a) Winslow discusses the causes of "dieback" in deciduous fruit trees in Riverside County, California. Roots of cherry were sent to Dr. G. Thorne who reported heavy invasions of the meadow nematode *Pratylenchus pratensis*. Similar destruction was also found in the roots of apricots and walnuts.

T.G.

362—California Fish and Game.

a. HERMAN, C. M., 1945.—“Some worm parasites of deer in California.” 31 (4), 201-208.

(362a) A survey of the diseases of deer in California shows that many may be caused by helminth parasites. *Thelazia californiensis* occurs on the surface of the eyeball, *Onchocerca cervipedis* is found under the skin of the feet, *Setaria cervi* may be very numerous in the abdominal cavity. From the blood only *Elaeophora schneideri* was recovered, while the lungs yielded 2 species of *Dictyocaulus*. The gut contained species of *Ostertagia*, *Haemonchus*, *Trichostrongylus*, *Oesophagostomum venulosum* and whipworm, while *Fasciola hepatica* occurred in the bile ducts. Cestodes were represented by species of *Moniezia* and *Thysanosoma actinoides*, and by unidentified species of *Cysticercus* which occurred most commonly on the mesenteries but were also found in heart muscle, lung and muscles.

P.A.C.

363—California and Western Medicine.

a. GARLAND, L. H., 1945.—“Radiological aspects of certain tropical diseases.” 62 (4), 158-161.
 b. PIEROSE, P. N. & BUTT, E. M., 1945.—“Edema of the eyelids in trichinosis.” 62 (4), 174-176.
 c. SCHÜTZ, R. B., 1945.—“Filariasis.” 63 (5), 221-224.

(363b) In two of six patients found post mortem to be trichinosed, the extra-ocular muscles were heavily infested with trichinae, although oedema of the eyelids was not observed in any of the six before death. The concept is advanced that the oedema may be a non-specific toxic manifestation.

E.M.S.

364—California Wool Grower.

*a. COLLINS, S. B., 1945.—“A brief on sheep parasites.” 21 (30), 10.

365—Canadian Journal of Comparative Medicine.

a. DAVIDSON, W. B., 1945.—“Nutritional deficiency diseases, their sources and effects.” 9 (6), 155-162.

(365a) Davidson considers some of the lesions and diseases produced among domestic stock by certain food deficiencies, and mentions that in sheep phosphorus metabolism may be seriously upset by heavy helminth infestations. A multiple deficiency disease, which has appeared among sheep out to grass, has rendered them particularly susceptible to infestation with *Haemonchus contortus*. This in turn imposes a heavy drain on the phosphorus and calcium intake, and in some cases the animals have been compelled to draw on mineral reserves in the bones.

P.A.C.

366—Chacra. Revista Mensual de Agricultura, Ganadería e Industrias Anexas. Buenos Aires.

*a. SALAZAR GERARD, R., 1945.—“El sanguaypé en los ovinos.” 15 (173), 14-15, 96.
 *b. ANON, 1945.—“Sobre la podredumbre de las raízillas de los citros.” 15 (180), 30-31.

367—Chinese Medical Journal. Chengtu.

*a. KUO, S. C., YUI, H. W. & CHANG, C. E., 1945.—“An abbreviated report on field survey of schistosomiasis in Szechwan.” 63A, 144-148.

368—Chinese Medical Journal. Shanghai.

a. PAN, J. S., 1945.—“Observations on rectal lesions in *Schistosoma japonicum* infection.” 64 (3/4), 55-59.

369—Citrus Industry.

a. WATSON, J. R., 1945.—“A new soil fumigant for root knot and other pests.” 26 (11), 8, 9, 16.

(369a) Watson gives a general account of cultural methods for the control of the root-knot nematode *Heterodera marioni*, such as crop rotation, the use of such immune cover crops as *Crotalaria spectabilis* and the adequate mulching of plants. He then mentions the soil fumigant D-D and says it has distinctly promising possibilities for the control of the pest. T.G.

370—Clínica y Laboratorio. Zaragoza.

a. SANTELICES DE LA MORA, A. & COS, J. F., 1945.—“Estudio sobre ascaridiosis intestinal.” 40 (235), 257-263.

371—Clinica Veterinaria. Milano.

a. ANON, 1945.—“L’infestazione strongiloide nel maiale.” 68, 29-30.
b. ANON, 1945.—“Sulla curabilità degli ascaridi al tetrachloruro e bicloruro di carbonio.” 68, III.

372—Clinical Journal.

a. CAWSTON, F. G., 1945.—“Chloroform in the treatment of worms.” 74 (5), 191-192.

(372a) Cawston is of opinion that chloroform flavoured with eucalyptus, in 2 doses of 22 minims in $\frac{1}{2}$ oz. castor oil given at an interval of half an hour in the early morning, seems to be uniformly effective for *Taenia saginata* and *T. solium*. R.T.L.

373—Coastal Cattleman. Texas.

*a. BARNES, G. W. & SMITH, A. L., 1945.—“Control of stomach worms in cattle.” 11 (7), 14-15.

374—Comptes Rendus (Doklady) de l’Académie des Sciences de l’URSS.

a. SKRJABIN, K. I. & SHIKHOBALOVA, N. P., 1945.—“On the taxonomic position of the genera *Acanthocheilonema* Cobbald and *Molinema* Freitas et Lent within the system of nematodes.” 47 (7), 526-528.
b. SKRJABIN, K. I., 1945.—“On the taxonomic position of *Haematotrephus fodiens* Linton, 1928 within the system of trematodes.” 48 (1), 75-76.
c. SKRJABIN, K. I. & KAROKHIN, V. I., 1945.—“On the re-arrangement of nematodes of the order Ascaridata Skryabin, 1915.” 48 (4), 297-299.
d. SKARBILOVICH, T. S., 1945.—“A contribution to the knowledge of the biological cycle of *Capillaria mucronata* (Molin, 1858), a nematode of the bladder of sable, marten and mink.” 48 (9), 687-688.
e. SKRJABIN, K. I., 1945.—“A contribution to the rearrangement in the taxonomy of trematodes belonging to the Opisthorchidae family.” 49 (2), 155-156.
f. IVANOV, I. I. & BURNASHEVA, S. A., 1945.—“Aerobic enzymic systems of certain intestinal helminths parasitic of cattle and sheep.” 49 (3), 231-232.
g. PUSHMENKOV, E. P., 1945.—“A contribution to the knowledge of the development cycle of the larvae of cestodes parasitic of the liver of the reindeer (*Cervus tarandus*).” 49 (4), 303-304.
h. CHERTKOVA, A. N., 1945.—“A new *Filaria* from the articulation socket of bird tibia.” 49 (4), 305-307.
i. SKRJABIN, K. I. & SHIKHOBALOVA, N. P., 1945.—“A new rearrangement of the taxonomy of the nematodes belonging to the family Filariidae Cobbald, 1864.” 49 (9), 690-692.

(374a) Skryabin & Shikhobalova believe that the genus *Acanthocheilonema* Cobbald, 1870 should never have been made synonymous with *Dipetalonema* Diesing, 1861 and that the genus *Molinema* Freitas & Lent, 1939 was erroneously placed in the subfamily Setariinae. They arrive at the following conclusions concerning these genera. (i) The genus *Dipetalonema* must embrace such species only as display a correlative combination of a cuticular peribuccal shield and a trifurcation of the caudal end. Such species are: *D. gracile* (Rud., 1809), *D. evansi*

(Lewis, 1882), and *D. multipapillata* Walton, 1927. The position of *D. roemerii* Linstow, 1905, cannot yet be decided. (ii) The genus *Acanthocheilonema* should be restored as an independent genus. It comprises the following species, all of which are deprived of a peribuccal shield: *A. dracunculoides* Cobbold, 1870, *A. perstans* (Manson, 1891), *A. grassii* (Noë, 1907), *A. reconditum* (Grassi, 1890), and *A. weissi* Seurat, 1914. *Filaria hippopotami* Leiper, 1910, is referred to this genus. The position of *Filaria australis* Linstow, 1890, cannot yet be decided. (iii) The representatives of the genera *Acanthocheilonema* and *Molinema* are entirely lacking any cuticular ornamentation of their cephalic ends, on account of which these genera are to be excluded from the subfamily Setariinae and referred to the subfamily Filiariinae. The genus *Dipetalonema* sensu stricto, must remain in the subfamily Setariinae. (iv) The diagnosis of the restored genus *Acanthocheilonema* is formulated and *A. dracunculoides* Cobbold, 1870, is cited as the type species.

J.J.C.B.

(374b) Linton originally described *Haematotrephus fodiens* in 2 forms, one free in the intestine of *Gavia immer*, and the other in pancreatic cysts. Skryabin considers that these are not even confamilial: the free intestinal form remains as *H. fodiens* (Cyclocoelidae), but the pancreatic form is characteristic of Opisthorchidae (Opisthorchinae), though unlike other forms, so that a new genus is created for it, and defined: *Erschoviorchis lintoni* nom. nov. N.G.S.

(374c) Skryabin & Karokhin hold that a fundamental re-arrangement of the order Ascaridata Skryabin, 1915, is imperative. The revision proposed by them is mainly concerned with the family Heterocheilidae Railliet & Henry, 1915, while the family Ascaridae Baird, 1853, remains untouched. The present sub-division of the Heterocheilidae into 4 subfamilies (i) Heterocheilinae Railliet & Henry, 1912, (ii) Crossophorinae Baylis, 1920, (iii) Goeziinae Travassos, 1919 and (iv) Anisakinae Railliet & Henry, 1912, is considered to be erroneous, and for reasons which are stated in detail, a re-arrangement is proposed which involves the formation of 2 new families and one new subfamily. The new interpretation of the taxonomy of the order Ascaridata is as follows: (i) Family Ascaridae Baird, 1853, with 2 subfamilies Ascarinae Railliet & Henry, 1912 and Ascaridiinae Travassos, 1919, (ii) Family Heterocheilidae Railliet & Henry, 1915, with 2 subfamilies Heterocheilinae Railliet & Henry, 1912 and Crossophorinae Baylis, 1920, (iii) Family Anisakidae n.fam. with 2 subfamilies Anisakinae Railliet & Henry, 1912 and Angusticaecinae n.subfam., (iv) Family Goeziidae n.fam. with a single genus *Goezia* Zeder, 1880.

J.J.C.B.

(374d) *Capillaria mucronata* occurs in sable, mink, marten and polecat and is particularly frequent in the stoat and American mink. Skarbilovich has proved experimentally that it can complete its life-cycle when it uses *Lumbricus rubellus* and *Lumbricus* sp. as intermediate host. In the earthworm, the parasites reached the infective stage after 20 to 25 days at a temperature of 25°C. They develop between the muscular layers of the body wall. Sable and marten which were fed infective larvae began to excrete eggs after 42 to 45 days. The total life of the *Capillaria* does not exceed 12 to 14 months.

P.A.C.

(374e) Skryabin finds that in the genus *Diasia* Travassos, only the type *D. diasi* Travassos can remain; that Ejsmont was mistaken in considering *Haematotrephus fodiens* Linton as congeneric [see above, No. 374b], and that *D. podilymbae* Olsen must represent a new subfamily, *Plotnikovinae*, *Plotnikovia* n.g. being characterized by the parallel-sided body, broad intestinal crura, median tandem testes, and diffuse vitellaria. The family relationships are reconsidered of *Witenbergia witenbergi* Vaz, 1932 (from the intestine of *Pseudoplatistoma tigrinum*), and because of the very long oesophagus, the well developed oral sucker and the receptaculum seminis being anterior to the ovary, it is placed in *Phocitrematinae*.

N.G.S.

(374f) Ivanov & Burnasheva demonstrate a respiratory action in *Thysanotenia ovilla* and show that it is able to oxidize paraphenylenediamine and sodium succinate. There is a sharp increase in respiratory action in the presence of these substances. Ground segments decolorize methylene blue in the presence of sodium succinate.

P.A.C.

(374g) Pushmenkov fed cysticerci from reindeer to puppies. Cysticerci from the muscles developed into *Taenia krabbei* while cysticerci from the liver developed into a species not yet described. The author names it *Taenia parenchymatosa* n.sp. and describes it as a delicate worm, reaching 94 mm. long and containing 270 to 280 segments. There are 30 hooks in 2 circlets which measure 0.23 to 0.24 mm. long and 0.13 to 0.16 mm. long respectively. Eggs from these adults were infective to another reindeer and indeed caused the death of the animal by liver rupture and consequent haemorrhage.

P.A.C.

(374h) Chertkova describes *Pelecitus armenica* n.sp., a filarial parasite of *Circus aeruginosus* in Armenia, the parasite being located in the articulation socket of the tibia. It can be distinguished by the possession of 14 cephalic suckers, the size of the spicules and the position of the anus in the female.

P.A.C.

(374i) The stock of available information concerning the taxonomy of the family Filariidae having increased greatly since its revision by Wehr (1935) and Skryabin & Shikholova (1936), the latter authors now propose a further re-arrangement of this group of nematodes. The criteria employed for this purpose are the similarity or dissimilarity of the spicules and the presence or absence of structural modifications of the cephalic end of the body. Two new families are erected, by raising the subfamilies Aproctinae and Setariinae to the status of families. Aproctidae n.fam. will be characterized by a combination of spicules similar both in size and structure with a cephalic body-end lacking any ornamentation. Setariidae n.fam. will be characterized by a combination of spicules differing both in size and structure with a cephalic body-end having rather complicated ornamentation. The diagnosis of the third family Filariidae in its new interpretation will fully coincide with that of the former subfamily Filariinae. In other words it will comprise such genera in which the dimorphous structure of the spicules is combined with the absence of any cephalic ornamentation. This reformed system results in the following arrangement: (i) Filariidae Cobbald, 1864, with subfamilies Filariinae Stiles, 1907 and Diplotriaeninae Skryabin, 1915; (ii) Setariidae n.fam. with subfamilies Setariinae Yorke & Maplestone, 1926, Dipetalonematinae n.subfam. and Stephano-filariinae n.subfam.; and (iii) Aproctidae n.fam. with subfamilies Aproctinae Yorke & Maplestone, 1926 and Tetracheilonematinae Wehr, 1935.

J.J.C.B.

375—Cornell Veterinarian.

a. WHITLOCK, J. H., 1945.—“The administration of phenothiazine and hydrocarbons to sheep.”
35 (4), 328-332.

(375a) Whitlock describes, with illustrations, a rapid and safe method of administering suspensions of phenothiazine or emulsions of tetrachlorethylene to sheep by means of a combined metal oesophageal tube and 60-c.c. glass-barrelled syringe. A 4-gallon reservoir can be fitted enabling dosing to be carried out, with the aid of three assistants, at the rate of 200 sheep per hour. The Shikles attachment did not handle the phenothiazine suspensions well but did excellently with tetrachlorethylene emulsions. None of the sheep dosed with tetrachlorethylene by this method showed any signs of dizziness or coma. Over 2,500 sheep were treated with only one fatality in which the cause of death was not ascertained. Commercial suspensions of phenothiazine varied widely in ease of administration. One containing 40% suspension of phenothiazine with bentonite and sodium dioctyl sulphosuccinate was vastly superior to others.

J.W.G.L.

376—Dakota Farmer.

*a. CARLSON, F. N., 1945.—“Management important in control of internal sheep parasites.”
65 (6), 16-17.

377—Dermatologica. Basel.

a. BURCKHARDT, W., 1945.—“Prurigo bei Bandwurm.” [Demonstration.] 91, 249.

378—Día Médico. Buenos Aires.

- a. TALICE, R. V., 1945.—“Cuando debe el médico pensar en la triquinosis?” 17 (21), 468-470.
- b. BREA, M. M., TAIANA, J. A. & BORAGINÀ, R. C., 1945.—Equinococosis pulmonar; sintomatología y diagnóstico en 150 casos.” 17 (40), 1124-1127, 1129-1131, 1133-1135.
- c. IVANSEVICH, O. & RIVAS, C. I., 1945.—“Equinococosis hidatídica del pulmón. El signo de la muesca.” 17 (44), 1253-1254, 1256-1257.

(378a) Talice considers the question of diagnosis of trichinelliasis, reviewing the various aspects important to the clinician. Eosinophilia is not constantly present though hyperleucocytosis appears to be the rule. A rise in temperature is frequent but irregular in degree, though it often persists for a long time. The pain varies but may be muscular, gastric or respiratory: it may be localized or general. Cutaneous symptoms are rare but gastro-hepatic ones, with dyspepsia, jaundice, vomiting etc., are commonly present. When the larvae invade the tissues, there may be nervous, pulmonary, renal or cardiac complications. P.A.C.

379—Día Médico. Buenos Aires. Supplemento.

- *a. RIVAS, C. I., 1945.—“Diagnóstico y tratamiento de los quistes hidatídicos del hígado.” 2, 57-64.

380—Duodecim.

- *a. HELANDER, E. V., 1945.—“Leveän heisimadon toksiileista ja matoanemiasta.” 61 (8), 594-602.

381—Enzymologia.

- a. GREMBERGEN, G. VAN, 1945.—“Le métabolisme respiratoire du cestode *Moniezia benedeni* (Moniez, 1879).” 11 (4/6), 268-281.

(381a) Van Grembergen has shown experimentally that the tissues of *Moniezia benedeni* absorb a large amount of oxygen, the method being strictly comparable with that of the higher vertebrates. Earlier work had suggested that cestodes have their own peculiar method of absorbing oxygen but these results show that the early techniques and results may have been faulty. P.A.C.

382—Extension Circular. Washington State College.

- *a. ANDERSON, E. J. & DODGE, J., 1945.—“The eelworm disease of potatoes.” No. 92, 2 pp.

383—Farmers' Bulletin. U.S. Department of Agriculture.

- a. HARTER, L. L., ZAUMAYER, W. J. & WADE, B. L., 1945.—“Pea diseases and their control.” No. 1735, ii+28 pp. [Revised.]

(383a) Root-knot caused by the nematode *Heterodera marioni* is one of the diseases of peas briefly described in this bulletin. Control measures to be taken are the growing of immune crops, with clean cultivation and avoidance of the distribution of the eelworm in soil, by animals and by drainage water. M.T.F.

384—Flora og Fauna.

- a. USSING, H., 1945.—“*Leucochloridium paradoxum* Carus. Et sjældent Fund fra Fladbro.” 51 (3/5), 94-96.

385—Florida Grower.

- a. WATSON, J. R., 1945.—“Starving controls root-knot.” 53 (7), 10.

(385a) Watson discusses various methods of controlling the root-knot nematode *Heterodera marioni* on truck-crop soils in Florida. He recommends frequent summer cultivations to keep the surface layers of soil well aerated and, coupled with this procedure, the growing of the resistant *Crotalaria spectabilis* in rows. Inter-row hoeing has to be carried out to check weed growth and in order to keep the soil well oxygenated to encourage the larvae of the parasite to hatch from their eggs. He claims that by this method the pest can be successfully controlled in one year. T.G.

386—Florists' Review.

a. COURTNEY, W. D. & BREAKY, E. P., 1945.—“Forcing lily bulbs after treatment for control of nematodes.” 96 (2496), 37-38.

(386a) A disease of Easter lilies, particularly Croft's variety, occurring in Washington State, U.S.A., has been found to be associated with the constant presence of *Aphelenchooides olesistus*. Courtney & Breakey have conducted experiments for its control consisting of treatment for one hour in warm water (110°F.) to which formalin has been added (1 pint to 25 gallons of water). Though the results of the various durations of treatment were not complete at the date this paper was written, there are clear indications that it is likely to prove efficacious in controlling the “dieback” and “bunchy top” conditions caused by the eelworms. T.G.

387—Gaceta Médica de Caracas.

a. GONZÁLEZ RINCONES, R., 1945.—“A propósito de bilharzia.” 53 (8), 69-72.
 b. GONZÁLEZ RINCONES, P., 1945.—“Stibioterapia per os.” 53 (17), 127-141.

(387b) In an attempt to overcome the drawbacks of oral administration of tartar emetic for the treatment of bilharziasis, the author has devised a keratin-coated pastille in which to every cg. of tartar emetic there is added 0.05 mg. of atropine and a small amount of thiamine. The maximum daily dose recommended is 2 cg. per 10 kg. body-weight given in 2 or 3 parts.

R.T.L.

388—Gaceta Médica Española.

a. TELLEZ LAFUENTE, D., 1945.—“Cuatro casos de hidatidosis externas, uno de ellos de cuerpo tiroides.” 19 (8), 363-365.
 b. ASENSIO GARCIA, C., 1945.—“Gran quiste hidatídico pulmonar, cavidad de alojamiento y de vaciado (operatorio) y mecánica respiratoria.” 19 (11), 510-514.

389—Gaceta Médica de México.

*a. MAZZOTTI, L., 1945.—“Consideraciones sobre la triquinosis en México.” 75, 41-46.
 *b. VARGAS, L., 1945.—“Notas sobre la oncocerciasis; epilepsia y oncocerciasis.” 75, 236-242.
 *c. ROBLES, C., 1945.—“Consideraciones acerca de la cisticercosis cerebral en los niños.” 75, 248-254.

(389c) [See also above, No. 337a.]

390—Giornale di Medicina. Palermo.

*a. SORCE, G., 1945.—“Su di un caso di cisti da echinococco della milza.” 2, 366-370.

391—Guernsey Breeders' Journal.

*a. KIRKPATRICK, M. G., 1945.—“Give dairy calves phenothiazine and salt?” 67, 1241, 1261.

392—Hawaii Medical Journal.

a. BABIONE, R. N., 1945.—“Mumu. A few facts about filariasis for folks who fear that filaria-infected fellows will fetch filariae from the front.” 5 (2), 69-71.

393—Health Bulletin. Melbourne.

a. COLE, G., 1945.—“Hydatid disease in Victoria.” Nos. 81/82, pp. 2178-2188. Addenda, pp. 2189-2192.

(393a) The distribution of the 278 hydatid cases notified between July 1926 and December 1944 in Victoria is tabulated under municipalities of the six Health Areas. Two-thirds of the cases occurred in the Western and North-Western Areas which have a combined population of about 350,000, i.e. less than one-fifth of the population of the State. 126 of these cases, i.e. 44.6%, occurred in an area of 10,893 square miles with a population of 89,330, the annual case rate being 7.2 per 100,000 population. Although the disease is most prevalent in sheep country,

25% of the dogs in a dairying district harboured adult *Echinococcus granulosus*. Suggestions are made for a vigorous anti-hydatid campaign and for legislative amendments to the Health Act to make the feeding of raw offal to dogs illegal, and to the Dog Act, 1928 to include provisions similar to those of the Dog Registration Amendment Act, 1937 of New Zealand which required all dog owners to be registered and to be supplied with the necessary dosage of arecoline hydrobromide.

R.T.L.

394—Herefordshire Agricultural Journal.

a. MENZIES, D. W., 1945.—“Internal parasitic worms of sheep.” 9 (2), 103, 105, 107.

395—Hospital. Rio de Janeiro.

a. ALBUQUERQUE, J. DE, 1945.—“Anemia verminotica e carência das vitaminas do grupo B. (Orientação terapêutica.)” 28 (1), 39-54.
 b. PAES DE OLIVEIRA, P., 1945.—“Helmintiase e anemia. Observações colhidas no meio militar.” 28 (6), 1007-1017. [English summary p. 1017.]

(395a) Albuquerque draws attention to the fact that the anaemia associated with certain helminths, particularly hookworm, in the intestine may be due largely to a lack of vitamins B₁ and B₂ in the diet, as these vitamins exert a protective action on the intestinal mucosa. He suggests therefore that hookworm disease should be treated not only with an appropriate vermifuge but also with vitamin B concentrates and with preparations of various minerals, mainly copper and iron.

P.A.C.

396—Igiene e Sanità Pubblica. Salerno.

*a. DONZELLI, F., 1945.—“Quattro anni di lotta contro l’anchilostomiasi in Calabria; prospette per una razionale profilassi.” 1, 190-203.

397—Indian Journal of Veterinary Science and Animal Husbandry.

a. MUDALIAR, S. V., 1945.—“Fatal enteritis in goats due to immature amphistomes, probably *Cotylophoron corylophorum*.” 15 (1), 54-56.
 b. SRIVASTAVA, H. D., 1945.—“A survey of the incidence of helminth infection in India at the Imperial Veterinary Research Institute, Izatnagar.” 15 (2), 146-148.
 c. THAPAR, G. S. & SINGHA, B. B., 1945.—“On the morphology of a new genus of amphistomes from the rumen of cattle in the United Provinces.” 15 (3), 219-222.
 d. MOGHE, M. A., 1945.—“Results of a survey on the nature and incidence of helminth infection in cattle, goats and sheep in the Central Provinces and Berar and Central India.” 15 (3), 222-230.
 e. SARWAR, M. M., 1945.—“New records of nematode parasites from Indian ruminants.” 15 (4), 286.

(397a) An account is given of the post-mortem findings in a goat. The pyloric end of the abomasum and the duodenum showed inflammation, thickening and oedema and was studded with immature amphistomes tentatively diagnosed as *Cotylophoron corylophorum*. R.T.L.

(397b) A survey of the helminth infections of sheep, goats, cattle and buffaloes of the Punjab, North-West Frontier Province and Sind was made between November 1940 and October 1942. The following species were of widespread occurrence or of economic importance: *Fasciola* spp., *Dicrocoelium dendriticum* (in hilly tracts only), *Cotylophoron corylophorum*, *Paramphistomum cervi*, *P. explanatum*, *Gastrophylax crumenifer*, *Dictyocaulus filaria*, *Protostrongylus rufescens*, *Haemonchus contortus*, *Mecistocirrus digitatus*, *Bunostomum* spp., *Oesophagostomum* spp., small trichostrongyles and hydatid. The incidence of each species in the various hosts is tabulated.

R.T.L.

(397c) A new Indian amphistome, *Olveria indica* n.g., n.sp., is described from the rumen of buffaloes and cattle examined at Lucknow, Etawah and Bareilly. It resembles the Cladorchinae, differing in possessing only one pair of longitudinal lymphatic ducts, in the nature of the uterine coils and in the division of the oesophagus into anterior muscular and posterior glandular portions. This last feature separates it from all known genera of amphistomes.

R.T.L.

(397d) A general survey is given of the helminths of sheep, goats and cattle identified for the Veterinary Departments of Baroda, Bombay, and the Central Provinces and Berar. The species found and their incidence are tabulated. Tables also give the seasonal incidence of the various infections. It is considered that investigations on the life-histories and prevention of the following species are very necessary: *Cotylophoron cotoylophorum*, *Gastrothylax crumenifer*, *Schistosoma*, *Mecistocirrus digitatus*, *Stilesia globipunctata*, *Avitellina centripunctata*, *Oesophagostomum venulosum*, *O. radiatum*, *Bunostomum trigonocephalum* and *Gaigeria pachyscelis*.

R.T.L.

(397e) *Marshallagia marshalli* in *Capra sibirica* at Mukteswar, *Haemonchus longistipes* in goats, sheep and cattle at Lahore, Peshawar and Karachi, and *H. similis* in cattle and buffaloes at Sialkot (Punjab) are recorded as new in these hosts for India.

R.T.L.

398—Indian Medical Journal.

- a. SUNDAR RAO, S., 1945.—“Filariasis in Bengal.” 39 (6), 170-171.
- b. SUNDAR RAO, S., 1945.—“Treatment of filarial infection and diseases.” 39 (7), 190-191.

(398a) In Bengal *Wuchereria bancrofti* is observed chiefly in urban localities; *W. malayi* is confined to rural areas. In the hilly and submontane districts filarial infection is absent but increases towards the sea: its incidence is less in East Bengal than in West Bengal. In Calcutta the incidence of infection is about 10%, but that of filarial disease is much higher owing to the influx of patients from outside.

R.T.L.

399—Instituto de Sanidad Vegetal, Ministerio de Agricultura, Buenos Aires.

- a. MARCHIONATTO, J. B., 1945.—“La ‘podredumbre de la raicilla’ del naranjo.” Serie A, Año 1, No. 1, 15 pp. [English summary p. 13.]
- b. BLANCHARD, E. E., 1945.—“Insectos y nemátodos relacionados con el cultivo del tabaco.” Serie A, Año 1, No. 6, 23 pp.

(399a) Marchionatto briefly summarizes the information from various workers done in Argentina on the “rootlet rot” of orange, which is ascribed to the nematode *Tylenchulus semi-penetrans* Cobb. The incidence of the disease is greatest in soils poor in organic matter and is severest on stock of sour orange. Improvement can be brought about by using less susceptible root stocks and by liberal manuring and mulching.

T.G.

(399b) The only species of nematode known to attack cultivated tobacco in the Argentine is *Heterodera marioni*.

R.T.L.

400—Jornal de Pediatria. Rio de Janeiro.

- a. GARCIA, A. R., 1945.—“Um caso de infestação humana pelo *Dipylidium caninum*.” 11 (4), 184-187.

401—Journal of the American Medical Association.

- a. EDDY, JR., J. H., 1945.—“Carbon tetrachloride poisoning. A preliminary report on the use of methionine in hepatins.” 128 (14), 994-996.
- b. MCKINLAY, C. A., 1945.—“Loeffler’s syndrome after cutaneous helminthiasis.” [Correspondence.] 129 (3), 231.
- c. ANON, 1945.—“Allergy to *Ascaris lumbricoides*.” [Annotation.] 129 (6), 473-474.
- d. LEHRMAN, N. S., 1945.—“Cutaneous helminthiasis.” [Correspondence.] 129 (6), 477.
- e. WRIGHT, D. O., 1945.—“Cutaneous helminthiasis.” [Correspondence.] 129 (6), 477.
- f. THOMPSON, K. J., RIFKIN, H. & ZARROW, M., 1945.—“Early filariasis in young soldiers. Clinical and pathologic analysis.” 129 (16), 1074-1079.
- g. ARKLESS, H. A. & HOLMES, J. H., 1945.—“Creeping eruption.” [Correspondence.] 129 (16), 1122.
- h. GOULD, S. E., 1945.—“An effective method for the control of trichinosis in the United States.” 129 (18), 1251-1254.

(401a) Two cases are reported as suggestive of the clinical value of methionine in certain types of liver damage and specifically in that caused by carbon tetrachloride.

R.T.L.

(401b) McKinlay, commenting on the publication of Wright & Gold [see Helm. Abs., Vol XIV, No. 110b], is of opinion that Loeffler's syndrome recorded therein " adds a hitherto unreported etiologic factor and supports the view that this syndrome is an allergic phenomenon".

R.T.L.

(401c) [This is an annotation of No. 480b, abstracted below.]

(401d, 401e) Lehrman, commenting on Wright & Gold's reference to *Ancylostoma braziliense* as a hitherto unreported factor in Loeffler's syndrome [see Helm. Abs., Vol. XIV, No. 110b], points out that no mention was made of possible infection with other hookworms. In reply Wright quotes the text of the original paper that the faecal examinations " failed to reveal presence of ova or parasites in any specimen ".

R.T.L.

(401g) Typical creeping eruption in the foot, probably due to *Ancylostoma braziliense* larvae, was accompanied by remote, scattered, pruritic skin lesions, held to be allergic in origin.

B.G.P.

(401h) Gould calls attention to the high incidence of trichinelliasis in the U.S.A., which has been shown to be as high as 36% where thorough methods of diagnosis were used. Nevertheless, the disease is uncontrolled at present. There are 3 principal methods of control: (i) microscopical inspection of pork, (ii) cooking of all garbage fed to pigs, (iii) processing of all pork prior to sale. The last is, in Gould's opinion, the only effective method. " Processing " is by methods of freezing, cooking, smoking, curing or other means which will render non-viable any trichinae present in meat. It is suggested that the Federal Government enact legislation requiring all pork intended for interstate shipment to be so processed. Raw pork in commercial quantities can be rendered safe by lowering its temperature to -35°C . (-31°F .) or below and maintaining this for two hours, or by freezing at -17.8°C . (0°F .) for 72 hours.

R.T.L.

402—Journal of the Association of Official Agricultural Chemists. Washington.

a. PAYFER, R. & MARSHALL, C. V., 1945.—" Gravimetric determination of phenothiazine." 28 (2), 429-430.

403—Journal of the Canadian Medical Services.

*a. MACLEOD, J. W., 1945.—" Trichiniasis in Royal Canadian Navy." 2, 650-655.

404—Journal of the Christian Medical Association of India, Burma and Ceylon.

a. NEECH, S. E., 1945.—" Anthiomaline in filariasis." 20 (5), 150-152.

405—Journal of Comparative Pathology and Therapeutics.

a. HOLMAN, H. H., 1945.—" Studies on the haematology of sheep. V. A survey of blood pictures in sheep diseases." 55 (3), 229-242.

(405a) The standards and definitions previously published for abnormalities in the blood of sheep are now applied to sheep diseases, including those caused by certain endoparasites. Of ten sheep with *Haemonchus contortus* three had macrocytic anaemia, three hypochromic anaemia and one a slight neutrophilia; in the remaining three the haemograms were normal. When *H. contortus* is absent or only in small numbers there is little chance of differentiating between species by the blood picture, except possibly in cases of liver-fluke infestation where dysfunction of the liver may lead to aplastic anaemia. In three cases of *Coenurus cerebralis* infection the blood picture was normal.

R.T.L.

406—Journal of the Department of Agriculture. Dublin.

a. CARROLL, J., 1945.—" Present day knowledge concerning some insect pests of farm crops." 42 (1), 81-93.

407—Journal of the Indian Medical Association.

- a. MAITRA, H., 1945.—“Guinea-worm infection.” 14 (8), 169.
- b. AHMAD, N., 1945.—“Problems of filariasis with reference to post-war planning in India.” 14 (12), 306-309.

(407b) Ahmad states that the effects of filarial infections in endemic areas in India are equal to those of malaria, and deserve the serious attention of post war planners. Suggestions are made for antifilarial schemes, for research for a specific, and for adequate medical and surgical training of personnel. R.T.L.

408—Journal of the International College of Surgeons.

- a. DIEZ, J., 1945.—“La equinococosis primitiva del conducto raquideo.” 8 (3), 297-301. [English, French & Russian summaries pp. 300-301.]

(408a) A case is reported in which a hydatid cyst was extirpated by laminectomy of the first 4 lumbar vertebrae. R.T.L.

409—Journal of Laboratory and Clinical Medicine.

- a. MAZZOTTI, L. & OSORIO, M. T., 1945.—“The diagnosis of enterobiasis. Comparative study of the Graham and Hall techniques in the diagnosis of enterobiasis.” 30 (12), 1046-1048.

(409a) Seventeen children heavily infected with *Enterobius vermicularis* were examined on five successive days by the NIH swab and Scotch cellulose tape loop methods. The former technique gave 91.7% and the latter 96.5% positives. In a second series of 240 children not previously examined the NIH technique gave 30% and the cellulose tape technique 45% positive findings. A third series comprising 430 individuals, mostly adults, gave 16% by the NIH and 32% by the cellulose tape method. These higher results occurred in all age groups and irrespective of sex. R.T.L.

410—Journal de Médecine de Lyon.

- a. GARIN, C., 1945.—“Le traitement de l'oxyurose.” 26, 509-510.

(410a) [This paper is summarized by Rouquès in Presse méd., 1946, 54 (4), 67— for abstract see Helm. Abs., Vol. XV, No. 231b.]

411—Journal of the Medical Society of New Jersey.

- a. SEGARD, C. P. & MORROW, J. R., 1945.—“Synopsis of some of the important tropical diseases.” 42 (1), 22-25.
- b. SEGARD, C. P., CASILLI, A. R., ALTSCHUL, F. & DE PONS, S., 1945.—“Synopsis on schistosomiasis.” 42 (11), 362-363.

412—Journal of the Michigan State Medical Society.

- a. HILLMAN, C. C., 1945.—“Observations on tropical medicine in the United States Army.” 44 (2), 165-170.
- b. LICHTWARDT, H. A., 1945.—“Tropical diseases in America after the war.” 44 (4), 382-386, 391.

413—Journal of Morphology.

- a. JONES, A. W., MOUNTS, B. W. & WOLCOTT, G. B., 1945.—“*Macravestibulum kepneri* n.sp.; a morphological and cytological study of a pronocephalid trematode.” 77 (3), 285-297.
- b. VAN CLEAVE, H. J., 1945.—“The genital vestibule and its significance in the morphology and taxonomy of the Acanthocephala, with particular reference to the genus *Corynosoma*.” 77 (3), 299-315.

(413a) Heavy infections of a new monostome named *Macravestibulum kepneri* n.sp. occur in Texas in the freshwater turtles, *Pseudemys troostii* and *P. texana*. It differs markedly in cirrus structure from *M. obtusicaudum* and *M. eversum*. The chromosomes are described in some detail. The genus belongs to Choanophorinae Caballero, 1942. R.T.L.

(413b) Van Cleave directs attention to the taxonomic significance of the inversion of the hind-body in some Acanthocephala, especially in *Corynosoma* in which it provides a sure method of distinguishing this genus from *Arhytmorhynchus* and *Polymorphus*. R.T.L.

414—Journal of the National Medical Association. New York.

*a. BRISCOE, M. S., 1945.—“Observations on vesical schistosomiasis in West Africa.” 37 (4), 112-114.

415—Journal of Neurosurgery. Springfield, Ill.

a. RITCHIE, W. P., FRENCH, L. A. & TITRUD, L. A., 1945.—“Cysticercosis. A case report.” 2 (6), 543-546.

416—Journal of Urology.

a. PETERS, C. N., HUNTRESS, R. L. & PORTER, J. E., 1945.—“Urinary schistosomiasis: report of two cases in Maine.” 54 (3), 301-306.
 b. YAMAUCHI, S., 1945.—“Chyluria: clinical, laboratory and statistical study of 45 personal cases observed in Hawaii.” 54 (3), 318-347.

(416b) Over a period of seven years Yamauchi has seen and studied 45 cases of chyluria in Honolulu. Microfilariae were never found in these cases although all had a history of exposure to infection. A comprehensive picture of the pathology of the disease is given. The long period which elapsed between the last possible exposure to filarial infection and the onset of chyluria, and the absence of eosinophilia in many of the cases suggest that filariasis does not actually initiate although it may predispose to the disease. The author expects its incidence in Northern United States to rise after the return of servicemen from endemic regions. Control of chyluria can be effected by repeated intrapelvic lavages with solutions of silver nitrate. Fat in the diet must be limited after this treatment. R.T.L.

417—Kungl. Fysiografiska Sällskapet i Lund. Förhandlingar.

a. BRINCK, P., 1945.—“Ett bidrag till kännedomen om rödingens biologi. Näringsval och parasiter.” 15, 170-184.

(417a) Helminth parasites found in *Salmo salvelinus* included:—*Discocotyle sagittata*, *Azygia robusta*, *Crepidostomum faeroense*, *Cyathocephalus truncatus*, *Eubothrium salvelini*, *Diphyllobothrium* sp. E.M.S.

418—Laboratorio Clinico. Rio de Janeiro.

*a. APOCALYPSE, JR., F., 1945.—“Verminose e anemia.” 25, 281-284.

419—Lancet.

a. ANON, 1945.—“Diphyllobothriid tapeworms of birds and man.” [Annotation.] Year 1945, 2 (6382), 822-823.

420—Leaflet. Ministry of Agriculture, Northern Ireland.

a. ANON, 1945.—“Potato root eelworm.” No. 117, 4 pp.

(420a) In Northern Ireland it is now compulsory for every person who suspects the presence of potato eelworm in a potato or tomato crop to notify the fact to the Ministry of Agriculture there under the Potato Root Eelworm (Northern Ireland) Order, 1945. Hitherto the infection has been confined mainly to gardens and allotments. The leaflet recommends the use of certified eelworm-free seed and the planting of potatoes at intervals of five years or more. The Ministry is carrying out a survey and examination of soils in which stock seed is grown, and proposes later to test all soils in which certified seed of any class is produced with the intention ultimately to grant certificates of freedom from eelworm for all seed sold for shipment. R.T.L.

421—Lekarz Wojskowy [Journal of the Polish Army Medical Corps]. Edinburgh.

a. RAYSKI, C., 1945.—“Biologia kilku schorzeń pasożytniczych.” 36, 265-270. [In Polish: English summary p. 270.]

(421a) In this article the biology of *Ascaris lumbricoides*, *Strongyloides stercoralis*, hook-worms and *Trichuris trichiura*, and of various protozoan parasites, is described. These parasites were found among the patients in two Polish military hospitals in Scotland. Owing to its importance, *Trichinella spiralis* is also mentioned. C.R.

422—Lyon Chirurgical.

a. MENEAULT, J., 1945.—“Echinococcosis alvéolaire du foie.” 40 (2), 213-216.
 b. MALLET-GUY, P. & MARION, P., 1945.—“Kyste hydatique de la rate. Splénectomie.” 40 (2), 224-230.
 c. KESSLER, G., 1945.—“Douve vivante dans le cholédoque, extraite par ponction du canal au cours d'une cholécystectomie pour lithiasse.” 40 (5), 595-597.
 d. MALLET-GUY, P. & MAILLET, P., 1945.—“Accidents biliaires de l'ascariasis.” 40 (6), 705-712.
 e. BONNIOT, A. & LECROART, F., 1945.—“Accidents biliaires de l'ascariasis.” 40 (6), 742-744.

423—M.S.C. Veterinarian, Michigan State College.

a. MUTH, O. H., 1945.—“Diseases of lambs encountered in Oregon.” 5 (2), 66-68, 84.

424—Medical Bulletin of the Mediterranean Theater of Operations.

*a. LEVI, S., 1945.—“Diagnosis of *Ascaris lumbricoides* by roentgenography.” 3, 12-15.

425—Medical Journal of Australia.

a. ROBB, D., 1945.—“A case of hydatid choleperitoneum.” 32nd Year, 1 (16), 394-395.

(425a) From the study of a case of hydatid choleperitoneum in an old cyst, without daughter cysts, which was operated on soon after rupture, Robb is of opinion that in these cases the adventitious peritoneal membrane need not be removed and that drainage only is necessary.

R.T.L.

426—Medical Parasitology and Parasitic Diseases.

a. BUKH, F. L., 1945.—[The data of helminth egg inspection of the sources of water supply of Ufa.] 14 (2), 66-67. [In Russian.]
 b. SALNIKOV, E. T., 1945.—[Helminths of the population of the Far Eastern Province.] 14 (2), 68-69. [In Russian.]
 c. PODYAPOLSKAYA, V. P., 1945.—[New methods in the therapy of enterobiasis.] 14 (2), 78-79. [In Russian.]
 d. PODYAPOLSKAYA, V. P., 1945.—[New methods in the therapy of taeniasis.] 14 (2), 79-81. [In Russian.]
 e. VASILKOVA, Z. G., 1945.—[Helminthiases in the Russian Soviet Federated Socialist Republic during the patriotic war.] 14 (4), 8-13. [In Russian.]
 f. VISHNEVSKAYA, S. M., 1945.—[Helminthological examination of the sewage, soil and vegetables from the Bezlyudov fields manured with sewage.] 14 (4), 14-18. [In Russian.]
 g. ALF, S., 1945.—[Possibility of contamination of soil by helminth eggs as a result of the digging-in of sewage.] 14 (4), 18-22. [In Russian.]
 h. SHIKHOBALOVA, N. P. & GORODILOVA, L. I., 1945.—[Dependence of the small percentage of ascariasis and trichuriasis in Samarkand on climatic and microclimatic factors.] 14 (4), 23-30. [In Russian.]
 i. SHIKHOBALOVA, N. P. & LEIKINA, E. S., 1945.—[Dependence of the small percentage of ascariasis and trichuriasis at Kokand on the climatic conditions of the locality.] 14 (4), 30-33. [In Russian.]
 j. ZAKHAROV, V. I., 1945.—[Epidemiology of alveolar echinococcosis in Kazakhstan.] 14 (4), 33-34. [In Russian.]
 k. BELOZEROVA, O. M. & KRILOVA, Z. V., 1945.—[Experiment in ascaris control at the children's village, “Muraveinik”, near Moscow.] 14 (4), 34-39. [In Russian.]

1. AVAKYAN, A. A., BELOZEROVA, O. M., KRILOVA, Z. V. & LITUNOVSKAYA, M. N., 1945.—[Experiment in ascaris control among the children of Shatura-Torf.] 14 (4), 39-42. [In Russian.]
- m. MARKIN, A. V., 1945.—[Helminth fauna of the population in Nizhni-Tagil, Sverdlovsk province.] 14 (4), 42-45. [In Russian.]
- n. GOLUBEVA, N. A., 1945.—[Concerning the metabolism of *Opisthorchis felineus*.] 14 (4), 45-48. [In Russian.]
- o. KLIRIKOV, V. A., 1945.—[A case of ascariasis of the liver.] 14 (4), 48-49. [In Russian.]
- p. KUDRYAVTSEV, V., 1945.—[Training of staff on malaria and helminthic diseases during wartime in Moscow Province.] 14 (4), 91-92. [In Russian.]

(426a) Bukh, examining the water from the river Belya supplying the Ufa reservoir, found eggs of *Ascaris lumbricoides*, *Taenia* sp., and *Enterobius vermicularis*; and, in tap water, eggs of *Enterobius vermicularis* and free-living nematodes. C.R.

(426b) Salnikov, examining the adult and child population in Khabarovsk and Blagoveshchensk in 1940 to 1944, found *Hymenolepis nana*, *Ascaris lumbricoides*, *Taenia* sp., *Trichuris trichiura*, *Diphyllobothrium latum* and *Enterobius vermicularis*. A table is given showing percentages of infestation for corresponding towns and years. C.R.

(426c) Podyapolskaya, reviewing recent literature, discusses the uses of gentian violet and phenothiazine against enterobiasis. C.R.

(426d) The author, reviewing the literature for the last 10 years, discusses the use of carbon tetrachloride against taeniasis. C.R.

(426e) From a detailed study of parasitic infestations, Vasilkova emphasizes the marked increase of these infestations during the war years and recommends various measures which might effectively control them. C.R.

(426f) Vishnevskaya found in the sewage, eggs of *Ascaris lumbricoides*, *Trichuris trichiura*, *Hymenolepis nana* and *Trichostrongylus* sp. In the soil, and in the sediment obtained from washed vegetables grown on land irrigated with sewage, eggs of *A. lumbricoides* were found. C.R.

(426g) In order to discover whether eggs of parasitic worms present in sewage penetrate the walls of latrine pits, Alf dug in sewage into holes 1.25 m.³ in capacity. After intervals of 2, 5-6 and 12 months, samples were taken from the soil 0.5, 1, 2 and 3 m. from the sides of the latrine and 0.5, 1.25 and 2.5 m. from beneath the base of the latrine. According to the author, no eggs were found in any of the samples. C.R.

(426h) According to the authors the eggs of *Ascaris lumbricoides* and *Trichuris trichiura* require for their development an average temperature of not more than 33° to 35°C. and a minimum soil humidity of 8%. The eggs of *A. lumbricoides* were found to be more resistant than those of *T. trichiura*. 50 to 100% of eggs placed in the soil during the summer months at depths of 2.5, 5 and 10 cm. were found to develop and to keep their vitality for more than a year. They were unaffected by repeated freezing and thawing. C.R.

(426i) The authors found that the population at Kokand was infested with *Ascaris lumbricoides* 1.5%, *Trichuris trichiura* 0.9%, *Hymenolepis nana* 6.9% and *Taenia saginata* 0.9%. They explain that the low percentage of infection with *A. lumbricoides* and *T. trichiura* in flat steppe country depends mostly on the climatic and microclimatic conditions in which the development of the eggs to the infective stage takes place. C.R.

(426j) Zakharov, reporting over the period 1934 to 1940 on examinations of 3,364 cadavers, noted that 45 were infested with hydatid and of these 14 (31.1%) were alveolar hydatid. From clinical data obtained covering the years 1929 to 1940, 387 persons were found infested with hydatid, 47 (12.1%) being alveolar hydatid. C.R.

(426k) The authors, examining 380 children in "Muraveinik" (=Anthill), found 285 (75.2%) to be infested with *Ascaris lumbricoides*. After two treatments in spring and two in autumn the infestation was reduced to 22.9%. A great source of infestation was found to be soil near the latrines, on playing-fields, gardens and on the potato field fertilized with human manure. C.R.

(426l) The authors, examining 842 children and 143 adults in Shatura-Torf found 699 (71%) to be infested with the following helminths: *Ascaris lumbricoides* 64.4%, *Trichuris trichiura* 3.8%, *Hymenolepis nana* 3.4% and *Taenia* sp. 0.4%. They found that two santonin tablets administered with an interval of 1½ hours and followed by a laxative reduced the percentage of *A. lumbricoides* (average 20%), but without improvement in sanitation and hygienic conditions the infestation reverted to its former state. C.R.

(426m) Observations over a period of five years among the children and adults of Nizhni-Tagil revealed the following helminths: *Ascaris lumbricoides*, *Trichuris trichiura*, *Enterobius vermicularis*, *Trichostrongylus* sp., *Taenia saginata*, *T. solium*, *Hymenolepis nana*, *H. diminuta*, *Diphyllobothrium latum* and *Dicrocoelium dendriticum*. C.R.

(426n) On sections of *Opisthorchis felineus* a number of quite large glycogen granules were observed in the ovary, vitelline glands and eggs, and there was also a small number of fine granules in the nuclei of the subcuticular cells. The parenchyma and cells of the "cuticulomuscular" sac had no glycogen. As *O. felineus* lives in a habitat practically devoid of oxygen it should belong to the group of anaerobic animals, but the absence of glycogen in the active parts of the body points to an aerobic metabolism. The author suggests that oxygen is obtained through the blood of the host. C.R.

(426o) In a post-mortem examination of a 70-year-old female patient a number of *Ascaris lumbricoides* were found in the liver. The parasites were also present in the stomach and duodenum. C.R.

427—Medicina. Buenos Aires.

- *a. GRAÑA, A., 1945.—"Título de isoaglutininas en pacientes con quiste hidatídico inyectados con líquido hidatídico." 5 (4), 365-368.

428—Medicina y Cirugía. Bogotá.

- *a. BONILLA NAAR, A., 1945.—"Técnicas de parasitología en la enseñanza y en la práctica." 9, 295.
- *b. BONILLA NAAR, A., 1945.—"Clasificación simplificada del reino animal." 9, 303.
- *c. BONILLA NAAR, A., 1945.—"Técnicas de parasitología en la enseñanza y en la práctica." 9, 344-349, 372-379.

429—Medicina Clínica. Barcelona.

- a. LORENZO, T. & PURSELL MÉNGUEZ, A., 1945.—"Membrana encarcelada." 5 (1), 45-56. [English, French and German summaries pp. 54-56.]

430—Medicina Colonial. Madrid.

- *a. APARICIO GARRIDO, J., 1945.—"El tratamiento de las teniasis humanas." 5, 30-47.
- *b. DIEZ-CANSECO DE LA PUERTA, J., 1945.—"Un caso de *Tenia hymenolepis diminuta*." 5, 101-104.
- c. FIGUEROA TABOADA, M. DE, 1945.—"Hemoptisis parasitarias." 6 (3), 177-189.

431—Medycyna Weterynaryjna.

- a. STAŚKIEWICZ, G., 1945.—"Badania szczurów na obecność włośni mięśniowych, a współczesny stan badań nad włośniami." 1 (5), 103-108. [In Polish: French summary pp. 107-108.]
- b. KOCYŁOWSKI, B., 1945.—"Przyczynki do biologii włośni w ustrojach ryb słodkowodnych." 1 (8), 228-233. [In Polish: French summary p. 233.]
- c. ERENBERG, L., 1945.—"Zapalenia spojówka i rogówki u bydła wywołane przez *Teliasia rhodesii*." 1 (8), 248. [In Polish.]
- d. ZARNOWSKI, E., 1945.—"W sprawie t.zw. pękania skóry u koni." [Correspondence] 1 (8), 262. [In Polish.]

(431a) Staśkiewicz, examining 685 rats in the Lublin abattoir, found 19 (2.8%) infested with cysts of *Trichinella spiralis*. C.R.

(431b) Kocylowski failed to infect carp or pike with *Trichinella spiralis* either by feeding or by injection of larval stages into the tissues. C.R.

(431c) Erenberg notes the occurrence of conjunctivitis and keratitis among cattle in Eastern Poland caused by *Thelazia rhodesii*. C.R.

(431d) In Poland, certain skin eruptions in horses are due to *Parafilaria multipapillosa*. The disease has been observed only in horses originating in Russia. C.R.

432—Memoria de la Sociedad de Ciencias Naturales La Salle.

a. VÉLEZ BOZA, F., 1945.—“*Bilharzia*.” 4 (12), 44, 46.

433—Memorias do Instituto Oswaldo Cruz.

- a. XAVIER, A. A. & SALLES, J. F. DE, 1945.—“O aparelho muscular dos proglottes de *Taenia saginata*.” 42 (1), 75-79. [English summary p. 79.]
- b. TRAVASSOS, L., 1945.—“Relatório da excursão do Instituto Oswaldo Cruz ao Rio Paranaí (Porto Cabral), em março e abril de 1944.” 42 (1), 151-165.
- c. SALLES, J. F. DE & JANSEN, J., 1945.—“Xenodiagnóstico na habronemose dos equídeos: estudo das larvas do helminto.” 42 (1), 207-215. [English summary p. 215.]
- d. CRUZ, W. O. & PIMENTA DE MELLO, R., 1945.—“Profilaxia da anemia ancilostomótica —Síndrome de carencia.” 42 (2), 401-448. [English summary p. 429.]
- e. TRAVASSOS, L., 1945.—“Relatório da excursão realizada no vale do rio Itaúnas, norte do Estado do Espírito Santo, nos meses de setembro e outubro de 1944.” 42 (3), 487-502.
- f. TRAVASSOS, L., 1945.—“*Heterakis fariae* Travassos, 1913 (Nematoidea-Subuluroidea).” 42 (3), 551-557.
- g. TRAVASSOS, L., 1945.—“Notas sobre Dicrocoeliidae.” 42 (3), 629-633.
- h. LENT, H., FREITAS, J. F. TEIXEIRA DE & PROENÇA, M. C., 1945.—“Alguns helmintos de aves colecionadas no Paraguai.” 43 (2), 271-285.
- i. TORRES, C. M. & PINTO, C., 1945.—“Lesões produzidas pelo *Schistosoma mansoni* no tatu (*Euphractus sexcinctus*), mecanismo de eliminação dos ovos e sensibilidade da espécie animal nas infestações experimentais.” 43 (2), 301-348. [English summary pp. 342-343.]

(433a) The muscle fibres of mature proglottides of *Taenia saginata* are arranged in an external longitudinal layer and a deeper internal transverse layer in contact with the body parenchyma and internal organs. Under the cuticle there is a circular or annular layer. These smooth muscle fibres anastomose frequently: it is exceptional to find isolated fibres. The calcareous and other bodies in the parenchyma are described. R.T.L.

(433c) Salles & Jansen describe and illustrate a technique of xenodiagnosis of habronemiasis simplified from that of Mello & Cuocolo [see Helm. Abs., Vol. XII, No. 272b], using ordinary apparatus available in any biology laboratory. By this technique they examined the faeces of 85 horses and two mules in Rio de Janeiro, finding *Habronema* spp. in 85 of the 87 animals. The species of the larvae recovered could not be determined. E.M.S.

(433f) Travassos redescribes *Heterakis fariae* from the caeca of *Odontophorus capueira*. This species resembles very closely the description of *Pseudaspisodera* Baylis & Daubney, and the validity of the genus *Pseudaspisodera* will be discussed in a later paper. E.M.S.

(433g) Four species of Dicrocoeliinae collected in the State of Espírito Santo by Travassos were *Lyperosomum oswaldoi*, *Eurytrema lubens*, *Olsoniella rara* and *Zonorchis goliath* n.sp. *Z. goliath*, which occurs in *Didelphis marsupialis aurita*, is nearly related to *Z. allentoshi* and *Z. komareki*. R.T.L.

(433h) Lent et al. have examined the helminth fauna of some birds in Paraguay. They describe *Acuaria majori* n.sp. from the stomach of *Cyanocorax chrysops*. It can be distinguished by the size of the spicules, by the extent of the cephalic cordons and by other less obvious features. They also give full descriptions of *Cyrnea* [= *Seurocynea*] *semilunaris* and *Torquatella crotophaga*. Of the other 7 species found, only the host and geographical distribution are given. P.A.C.

(433i) In an armadillo which had been infected 94 days earlier with *Schistosoma mansoni*, tubercles were found only in the intestinal tract, the liver and haemolymph nodes. In the small intestine these were limited to the submucosa while in the large intestine they were also found in the mucosa. This is probably due, in part, to the large vessels that enter the mucosa and to the irregularity of the mucosal muscles. Liberation of the eggs is accompanied by a cellular infiltration with histolysis and breakdown of the walls of the glands of Lieberkühn when the eggs become transferred to the cysts. Associated with and resulting from the extrusion of so many ova there is chronic enteritis and catarrh induced by secondary bacteria and toxins. Polyps may also appear in the large intestine with catarrhal colitis. P.A.C.

434—Middlesex Veterinarian. Waltham, Mass.

a. SILVERMAN, M. J., 1945.—“Trichinosis.” 5, 26-28.

435—Military Surgeon.

a. UNITED STATES PUBLIC HEALTH SERVICE, 1945.—“Studies on schistosomes.” 96 (6), 543-544.

(435a) Recent experiments indicate that *Tropicorbis havanensis* is a suitable intermediary for *Schistosoma mansoni*. Specimens were collected from a lake on the campus of Louisiana State University. U.S. National Museum specimens are recorded as coming from Lake Pontchartrain, Louisiana, from a lake near New Braunfels, Comal County, Texas and from Cuba. R.T.L.

436—Mimeograph Paper. Georgia Coastal Plain Experiment Station.

a. ANON, 1945.—“Weed and root-knot control in tobacco plant beds with uramon and cyanamid.” No. 22, 1 p.

(436a) Partial control of root-knot, 70-95% elimination of weed growth, and better growth and stand of tobacco seedlings in seed beds are claimed to result from the application of a mixture of 100 lb. uramon (urea) and 50 lb. cyanamide, or 100 lb. of cyanamide alone, per 100 square yards of ground. The soil must be well broken up beforehand, the chemicals broadcast and then thoroughly well mixed with the top 5 to 6 inches of soil. This should be done in late September and the tobacco sown at the end of December. M.T.F.

437—Mississippi Doctor.

a. BRANNON, JR., R. A., MILLER, C. E. & OSWALT, Z. E., 1945.—“Survey of incidence of hookworm infection in George County, Mississippi, 1944-1945.” 23, 409-412.

438—Montana Farmer.

a. WELCH, H., 1945.—“Worms in lambs.” 32 (19), 17.

439—Murrelet.

a. RANKIN, JR., J. S., 1945.—“Ecology of the helminth parasites of small mammals collected from Northrup Canyon, Upper Grand Coulee, Washington.” 26 (1), 11-14.

(439a) *Syphacia obvelata* was found in various species of *Peromyscus*, *Microtus*, *Reithrodontomys* and *Eutamias* from Northrup Canyon. *Rictularia coloradensis* occurred among *Peromyscus* and *Eutamias*. *Hymenolepis diminuta* was recovered from *Thomomys*, *Reithrodontomys*, *Microtus* and *Neotoma*. *Andrya communis* was limited to the genus *Microtus* while a single case of *Cysticercus fasciolaris* occurred in *Neotoma*. P.A.C.

440—Natuurwetenschappelijk Tijdschrift voor Nederlandsch Indië.

a. SNAPPER, L., 1945.—“Medical contributions from the Netherlands Indies.” 102 (Special Supplement), 309-320.

(440a) The steps are recalled which led Lichtenstein & Brug to recognize and name *Wuchereria malayi*, to which much of the filariasis in the western part of the East Indian Archipelago is due. In Sumatra both *W. bancrofti* and *W. malayi* occur; in Java *W. malayi* alone is found—in the delta of the Serajoe River. On Celebes filariasis is due to *W. bancrofti* while on Ceram Island all cases of filariasis are due to *W. malayi*. On the nearby Island of Boeroe, on all islands to the east thereof and on New Guinea, *W. bancrofti* only is found.

R.T.L.

441—New York State Journal of Medicine.

a. BROWN, H. W., 1945.—“Tropical diseases with special references to filariasis (*Wuchereria bancrofti*).” 45 (22), 2405-2411.

(441a) Brown summarizes the clinical picture of filariasis, its course in American servicemen, its clinical and laboratory diagnosis, including intradermal and serological tests, and recalls his own success [see Helm. Abs., Vol. XIII, No. 113d] with anthiomaline in reducing the microfilarial count, and that sulphonamides have been used successfully in the treatment of the acute recurring lymphangitis and cellulitis associated with filariasis.

R.T.L.

442—Nordisk Medicin.

a. SCHJØTH-IVERSEN, I., 1945.—“Echinokokkcyyster i peritoneum.” 26 (19), 1007-1010.

443—North Carolina Medical Journal.

a. HAYMAN, JR., J. M., 1945.—“The early manifestations of filariasis.” 6 (9), 397-404.

(443a) The course of Bancroftian filariasis is discussed under 4 stages: (i) an incubation period of one to 7 years, (ii) latent symptomless period lasting several years or lifelong, (iii) acute stage of recurrent lymphangitis, adenitis and scrotal swelling lasting several days to 2 weeks and often accompanied by fever, (iv) chronic stage, seen almost exclusively in natives in the endemic areas or in others repeatedly infected over several years, manifested by elephantiasis, chyluria, chylous ascites and diarrhoea, arthritis, lymph scrotum, varicose lymph nodes and filarial abscess. The clinical picture, as seen in the U.S. armed forces and recently reported upon by many writers, is summarized.

R.T.L.

444—Northwest Medicine.

a. QUEEN, F. B., 1945.—“Tropical diseases of increasing importance.” 44 (3), 80-85; (4), 122-127.

(444a) Among the tropical diseases of which Queen gives a general account are hookworm disease (p. 84), filariasis (p. 123), onchocerciasis (p. 124), loiasis, dracunculiasis, and schistosomiasis (p. 125).

B.G.P.

445—Occasional Papers on Mollusks, Harvard University.

a. ABBOTT, R. T., 1945.—“The Philippine intermediate host (*Schistosomophora quadrasi*) of schistosomiasis.” 1 (2), 5-16.

(445a) *Schistosomophora quadrasi* is described and reference is made to its role as vector of *Schistosoma mansoni* in the Philippines.

E.M.S.

446—Papers of the Michigan Academy of Science, Arts and Letters.

a. JONES, K. L., 1945.—“‘Root nodules’ on zinnia produced by nematodes.” Year 1944, 30, 67-70.

(446a) Jones gives a brief account of certain galls which he found on the roots of zinnia plants and which he considers may have been caused by nematodes. Adult nematodes were not found on dissecting galls but some unidentified larval nematodes were seen in stained sections of galls.

T.G.

447—Papers and Proceedings of the Royal Society of Tasmania.

a. CROWCROFT, P. W., 1945.—“New trematodes from Tasmanian fishes (Order, Digenea. Family, Allocreadiidae).” Year 1944, pp. 61–69.

(447a) Crowcroft reviews the genus *Coitocaecum* Nicoll, and provides a key to 14 species. *C. parvum* n.sp. from *Pseudaphritis urvillii* and *Galaxias attenuatus* from Risdon, Tasmania, is described: its nearest relative is *C. anaspis*; the progenetic and normal forms of this are compared from New Zealand and Tasmania, and some doubt is expressed as to the identity of the material from the two geographic regions. The family Opecoelidae is abandoned, but the subfamily is retained. *Gnathomyzon insolens* n.g., n.sp. (*Allocreadiinae*) is described from *Pseudolabrus tetricus* from the Derwent Estuary: the genus is distinguished by the strongly developed acetabulum with lateral jaw-like gripping organs, a highly muscular cirrus pouch with an internal vesicula seminalis (but lacking a true cirrus), and the anterior bifurcation of the excretory vesicle.

N.G.S.

448—Pediatria. Moscow.

a. SCHULMAN, S. S., ABERMAN, E. S. & KALNING, A. A., 1945.—[Connection of enterobiasis in children with faecal soiling of the hands.] 1945 (1), pp. 50–53. [In Russian.]

449—Pediatria de las Américas. México.

*a. VÁZQUEZ PAUSA, A., INCLAN SANDOVAL, A., SELLEK AZZI, A. & GARCÍA VÁZQUEZ, M., 1945.—“Fasciola hepática.” 3, 740–744.

450—Policlinico (Sezione Pratica).

*a. FURBETTA, D., 1945.—“Sulla desensibilizzazione con liquido idatideo come pratica profilattica agli interventi chirurgici delle echinococcosi (nota preventiva).” 52, 393–394.

451—Poultry and Rabbit Monthly.

*a. LEHMAN, H. H., 1945.—“Worms in poultry.” 13 (6), 8, 12.

452—Prensa Médica Argentina.

a. ZAVALETÀ, D. E., 1945.—“Quiste hidatídico del bazo.” 32 (16), 713–718.
b. ESPERNE, P., 1945.—“Aspiración quirúrgica de quistes hidáticos. Stop de la membrana.” 32 (48), 2380–2382.

453—Presse Médicale.

a. ETÈVE, J., 1945.—“Un agent chimiothérapique nouveau : la phénothiazine ; ses propriétés antihelminthiques et son utilisation dans le traitement de l’oxyurose.” 53 (35), 467–468.
b. LAVIER, G., 1945.—“La valeur diagnostique du taux d’éosinophilie sanguine dans les helminthiases.” 53 (40), 535–536.

(453a) Etève summarizes the recent literature on phenothiazine and briefly describes its chemical constitution, metabolism, toxicity, and its use in veterinary and human medicine as an anthelmintic and as a urinary antiseptic.

R.T.L.

(453b) Lavier draws attention to the fact that the presence of an eosinophilia in the circulating blood is not necessarily indicative of the presence of helminths. Even in cases of helminthiasis it probably appears before ova can be demonstrated, reaches its maximum, then falls while ova are still being extruded. Similarly, absence of eosinophilia does not necessarily mean that no helminths are present.

P.A.C.

454—Proceedings. Hawaiian Academy of Science.

a. ENRIGHT, J. R., 1945.—“Rat-borne diseases in Hawaii.” [Abstract.] 16th, 17th & 18th Annual Meetings, 1940–1943, p. 14.
b. ZIMMERMAN, E. C., 1945.—“Human filariasis in the Pacific.” [Abstract.] 19th & 20th Annual Meetings, 1943–1945, p. 5.

(454a) Rats in Hawaii are carriers of 11 species of parasites which may be transmitted to man. Of these the most important are *Trichinella spiralis*, *Hymenolepis nana* and *H. diminuta*.

P.A.C.

(454b) Filariasis is widespread in the Pacific Islands. In Hawaii *Culex fatigans* and *Aedes aegypti*, which are suitable vectors, are abundant but there is no evidence as to how the disease is actually transmitted in the territory. Blockage of the lymphatics gives rise to various pathological conditions—lymph scrotum, varicose groin lymph nodes, chyluria, chylocoele and abdominal dropsy. Elephantiasis occurs in long-standing cases. P.A.C.

455—Proceedings of the Indiana Academy of Science.

- CABLE, R. M. & KRAUS, L., 1945.—“The trematode parasites of a species of *Goniobasis* from the Tippecanoe River, Indiana.” [Abstract.] 54, 197.
- SEITNER, P. G., 1945.—“Studies on four new species of xiphidiocercariae of the *Virgula* type (Trematoda : Digenea).” [Abstract.] 54, 197.
- HEADLEE, W. H., 1945.—“Notes on the incidence, biology and medical importance of parasites of man in Indiana.” [Abstract.] 54, 198.

(455a) Cable & Kraus examined 1,367 snails of a species of *Goniobasis* for the emergence of cercariae, and found 82 (6%) to be infected with some 10 species. At least 2 are thought to be new—xiphidiocercariae of the *Virgula* type—and will be described elsewhere. N.G.S.

(455b) Seitner reports the finding of 5 species of *Virgula* type cercariae within a small area in Indiana, adumbrating his fuller account [see Helm. Abs., Vol. XIV, No. 123i]. N.G.S.

(455c) Headlee analyses the parasitological findings on his clinical examination of 2,875 people in Indiana, giving the percentage incidence of :—Protozoa, 10 species; nematodes, 5 species; cestodes, 4 species; and trematodes, 2 species (2 isolated cases from outsiders). A list of 24 arthropod ectoparasites and vectors is appended. N.G.S.

456—Proceedings of the Louisiana Academy of Science.

- GUYOL, J. R. & TODD, A. C., 1945.—“*Zonothrix tropisterna* Todd (Nematoda) from water scavenger beetles in Louisiana.” Year 1944, 9, 69–70.

(456a) Guyol & Todd report the occurrence of the oxyurid nematode *Zonothrix tropisterna* Todd, 1942 in two further species of water scavenger beetles, namely, *Tropisterna sublaevis* (Leconte) and *T. striolatus* (Leconte). T.G.

457—Proceedings. South African Sugar (Technologists') Association.

- WAGER, V. A., 1945.—“Compost and disease.” 19th (1945), pp. 85–90.

(457a) While admitting that compost is one of the best promoters of vigorous plant growth, Wager criticizes Howard and others who state that humus confers resistance to disease. He gives an illustrated account of a series of experiments on tomatoes grown in soil in tins, some of which were infected by the addition of eelworm nodules (*Heterodera marioni*). All the eelworm-infected plants, whether growing in poor soil, fertilized soil or soil with compost up to 100 tons per acre became stunted and their roots were found to be one mass of nodules, while the controls were perfectly healthy. R.T.L.

458—Proceedings and Transactions of the Texas Academy of Science.

- JONES, A. W., MOUNTS, B. W. & WOLCOTT, G. B., 1945.—“A pronocephalid trematode from the *a-Pseudemys*.” [Abstract.] Year 1944, 28, 92–93.

(458a) Turtles of the species *Pseudemys troostii* and *P. texana* contained heavy infestations of a monostome allied to *Macravestibulum* but distinguished by the possession of 2 accessory vesicles opening into the cirrus. The authors describe the chromosome formation and number, maturation, fertilization and early cleavage. [See also above No. 413a.] P.A.C.

459—Proceedings of the United States National Museum.

a. FISHER, W. W., 1945.—“New beetles of the family Eucnemididae from Central America and the West Indies.” *96*, 79-93.

(459a) *Nematodes* referred to on pp. 92-93 of this paper are not *Nematoda* but beetles: a genus of the coleopteran beetles rejoices in the generic name *Nematodes* Berthold, 1827.

T.G.

460—Progrès Médical.

*a. DESCHIENS, R., 1945.—“Le traitement de l'oxyurose.” *73*, 181-186.

461—Progressive Farmer. Georgia-Alabama-Florida Edition.

*a. KING, G. H., 1945.—“Nematodes can be controlled.” *60* (4), 24.

462—Publicações Médicas. São Paulo.

a. AGUIAR, O. G. DE, 1945.—“Em torno de um caso de esquistossomose.” *17* (1), 25-27, 29-30.

463—Publications. Tobacco Research Board, Southern Rhodesia.

a. ANON, 1945.—“Root knot nematode.” No. 8 [Annual Report of the Trelawney Tobacco Research Station for 1944], pp. 40-59.

(463a) This report covers several experiments, mostly in the second year of a three-year series designed by R. W. Jack to test the effect of various agronomic factors on *Heterodera marioni* infestation in tobacco. Additional hoeings in the dry season had no significant effect on infestation or on yield of tobacco. Rotations involving sunn hemp turned in before tobacco gave a much lower infestation than Kaffir beans (cowpea) before tobacco, but the yield was only slightly better. A comparison of dhal (*Cajanus indicus*) versus weed fallow before tobacco gave no significant differences. Compost at 0, 4, 8 and 16 tons per acre gave no infestation differences and no decrease on the previous year; a slight but not significant yield increase was shown only by the highest (uneconomic) rate of composting. The use of clean versus infested seedlings on infested soil gave no significant advantage to the clean, probably because the soil was too heavily infested. Planting on hills formed from the top 2 in. of soil gave a significant reduction of highly infested plants compared with planting on standard ridges: this is correlated with the absence of eelworm larvae from the upper soil in hot weather. In general, there was no correlation between infestation and yield, many well grown plants being heavily galled. Cotton of the strain “9L34” was highly resistant to eelworm attack, as were the velvet bean varieties “Somerset”, “Marbillee”, and “Jubilack”; seven soya bean strains were highly susceptible. Pots of infested soil submerged in rain water for varying times and then planted with sunflowers as indicators, showed that some larvae survive submergence for 90 days, but none for 105 days. Tobacco plant residues left exposed for three weeks can safely be used for making compost. At the end of the dry season (19th October) no larvae were found in the top 4 in. of soil. Additional working of the top 6 in. of soil does not accelerate the drying-out of that layer. An appendix gives additions and corrections to the previous year's list of native and weed hosts of *H. marioni*.

B.G.P.

464—Puerto Rico Journal of Public Health and Tropical Medicine.

a. HERNÁNDEZ MORALES, F., 1945.—“Schistosomiasis mansoni manifestations of the large intestine.” *20* (4), 492-498. [Also in Spanish pp. 499-506.]
 b. HERNÁNDEZ MORALES, F. & RUIZ CESTERO, G., 1945.—“Roentgenological changes of the small intestine in the presence of *Schistosoma mansoni*.” *20* (4), 507-510. [Also in Spanish pp. 511-514.]
 c. BACIGALUPO, J., 1945.—“The importance of some mosquitoes of the Argentine Republic in the transmission of dog filariasis.” *21* (1), 14-16. [Also in Spanish pp. 3-13.]
 d. MALDONADO, J. F., 1945.—“The life-history and biology of *Platynosomum fastosum* Kossak, 1910 (Trematoda: Dicrocoeliidae).” *21* (1), 17-39. [Also in Spanish pp. 40-60.]
 e. WELLER, T. H. & DAMMIN, G. J., 1945.—“The incidence and distribution of *Schistosoma mansoni* and other helminths in Puerto Rico.” *21* (2), 125-147. [Also in Spanish pp. 148-165.]

f. HERNÁNDEZ MORALES, F. & OLIVER GONZÁLEZ, J., 1945.—“Ova of *Schistosoma mansoni* in purged and unpurged fecal specimens.” 21 (2), 209-210. [Also in Spanish pp. 211-212.]
 g. HERNÁNDEZ MORALES, F., 1945.—“Poisoning by oleoresin of *aspidium*. Report of a case with post mortem findings.” 21 (2), 213-218. [Also in Spanish pp. 219-225.]

(464a) In Puerto Rico the intestinal lesions of Schistosomiasis mansoni are usually mild. Mild inflammatory changes occur during the acute diarrhoeic stage but rectal polypi are infrequent. A common sign of infection is an indurated cord-like sigmoid. The author made rectosigmoidoscopic examinations on 255 patients, in 64 of whom the liver or spleen were enlarged. In practically 50% the mucous membrane showed numerous scattered haemorrhages about the size of a pinhead. The contrast between the lesions found in Puerto Rico and those found in Egypt is commented upon. R.T.L.

(464c) In the Argentine *Dirofilaria immitis* develops in *Aedes albifasciatus* and *Psorophora cyanescens* as well as in *Taeniorhynchus titillans* previously recorded. *Culex quinquefasciatus* could not be induced to bite dogs. None of these mosquitoes were found naturally infected. R.T.L.

(464d) Maldonado confirms that *Subulina octona* is intermediate host of *Platynosomum fastosum* experimentally and in nature. The miracidium hatches within 15 minutes in the crop of this snail. The mother and daughter sporocysts are described in detail. The daughter sporocysts leave the snail and become established in the common bile duct of the lizard, *Anolis cristatellus*. The cat acquires infection by preying on these lizards. White mice were infected experimentally and eggs were passed in the excrement 8 weeks afterwards. R.T.L.

(464e) By using a modified Telemann acid-ether centrifugation technique, the following data were obtained from single stool specimens of 19,139 Puerto Rican selective service registrants: *Schistosoma mansoni* 9.97%, hookworm 56.5%, *Ascaris lumbricoides* 6.7%, *Trichuris trichiura* 76.3%, *Strongyloides stercoralis* 10.4%, *Hymenolepis nana* 0.15%, *Taenia* sp. 0.03%. The general helminth index was 1.6. The incidence of these infections is tabulated for the various zones and municipalities and for various ages and occupations. R.T.L.

(464f) The eggs of *Schistosoma mansoni* can be found in the faeces more readily after purgation. R.T.L.

(464g) In a case passing *Taenia* segments, 6 gm. of oleoresin of *aspidium* was administered through a duodenal tube in four doses at intervals of 15 minutes. One hour after the last dose 30 gm. of magnesium sulphate was given by duodenal tube. Rapid and profound peripheral vascular collapse occurred: the patient died three hours later. Post-mortem the lungs showed intense congestion. The alimentary canal showed no notable ante-mortem changes. R.T.L.

465—Quarterly Bulletin. Indiana University Medical Center.

a. MUNTZ, H. M., HEADLEE, W. H. & RITCHIEY, J. O., 1945.—“Fish tapeworm.” 7, 12-17.

466—Radiologia Clinica. Basel.

a. DRUCKMANN, A., 1945.—“An X-ray study of the development of pulmonary echinococcus.” 14 (6), 309-321. [German, French & Italian summaries pp. 320-321.]

467—Recueil de Médecine Vétérinaire.

a. GUILHON, J. & PRICUZEAU, M., 1945.—“La paramphistomose bovine en France.” 121 (8), 225-237.

(467a) Of the numerous known species of amphistomes two only occur in France, viz., *Paramphistomum cervi* and *Cotylophoron cotylophorum*. Guilhon & Priouzeau summarize the literature and give notes on their pathological findings in four cases. There is an enteritis of varying severity associated with the invasion of the mucosa of the duodenum by the young

stages. When infection is massive it may be fatal. There is a spontaneous cure when the immature stages migrate to the rumen; large numbers of adults, however, may produce a chronic gastritis.

R.T.L.

468—Report of the Chief of the Bureau of Animal Industry. United States Department of Agriculture.

a. UNITED STATES BUREAU OF ANIMAL INDUSTRY, 1945.—“Livestock and poultry parasite investigations.” Year 1944-1945, pp. 32-39.

(468a) Miller, as Chief of the Bureau of Animal Industry, summarizes the investigations made in the Zoological Division during 1944 to 1945 on the parasites of livestock and poultry. Tests of the free-choice administration to horses of phenothiazine, one part to 40 of salt, have shown some promise. The average daily intake was 0.75 gm. per animal and proved successful in 6 out of 7 horses. In cattle there was evidence that the consumption of the medicated mineral mixtures was materially influenced by diet. When calves fed on timothy hay and grain had access to a mixture of 25 parts of salt with one of phenothiazine for 117 days, the average intake was slightly less than 10 gm. of the mixture daily, which proved inadequate. A non-medicated mineral mixture followed for 45 days and the average intake was about 13 gm. Thereafter for 178 days the animals were given 5% of phenothiazine in this mixture (i.e. 1 : 19); for the first 55 days while the animals were still on timothy hay the average intake of the mixture was 33 gm. per day, but when alfalfa replaced the timothy hay for 55 days the average intake was only 11 gm. per head, and finally when changed back to timothy hay for 68 days the medicated mineral mixture was consumed at the rate of about 22 gm. per day. Faecal examinations showed that the phenothiazine intake while the animals were on timothy hay was adequate, but inadequate while they were on alfalfa. A hexachlorethane-bentonite suspension proved effective in 30 c.c. doses in removing *Fasciola hepatica* in 104 out of 110 fluky sheep; a simplified method for preparing this suspension was devised. While experimental infections of sheep with hookworm (*Bunostomum*) caused a moderately severe anaemia and retarded growth, field studies suggested that natural infections are far more damaging. Diet appears to be of paramount importance in determining the condition and survival of heavily infected lambs. The adults of *Elaeophora schneideri* live in the arteries and the larvae are located in the skin of sheep. Three antimony compounds, including tartar emetic injected in 0.3 gm. doses weekly for eight weeks, induced complete healing of the lesions. Goats which were treated with salt mixtures containing phenothiazine were protected from gross parasitism. A regimen of periodic salting with phenothiazine is suggested where weekly salting is practised. For the control of pig parasites a combination of good feeding and sanitary practice is recommended. Further work on the control of worms in pigs by feeding whey and by sodium fluoride is reported.

R.T.L.

469—Report of the Council for Scientific and Industrial Research, Australia.

a. AUSTRALIA. COUNCIL FOR SCIENTIFIC AND INDUSTRIAL RESEARCH, 1945.—“Animal health investigations.” 19th (1944-45), pp. 31-39.

(469a) Brief reference is made to preliminary anthelmintic tests by the McMaster Animal Health Laboratory of a further series of arsenites and arsenates, none of which were strikingly effective against *Haemonchus contortus*. Phenothiazine as a lick is unlikely to control *Trichostyngylus* spp. once heavy infections have occurred, and its value in licks against *Oesophagostomum columbianum* is doubtful. A number of epidemiological field trials were set up in Queensland. “Self-cure” cannot be attributed to worms dying of old age. *Dictyocaulus filaria* infections reach their highest level in late winter and decrease suddenly without treatment in September to October. Light infections with *Trichostyngylus* spp. reduced body-weight and wool growth: wool growth was gradually reduced to 40% over a period of four months. Avoidance of staining of wool during dosing with phenothiazine was studied. With syringes which deliver a mixed dose of tetrachlorethylene and copper sulphate, tetrachlorethylene proved a satisfactory substitute for nicotine sulphate when this was in short supply.

R.T.L.

470—Report of the Department of Scientific and Industrial Research, New Zealand.

a. NEW ZEALAND. DEPARTMENT OF SCIENTIFIC AND INDUSTRIAL RESEARCH, 1945.—“Soil treatments.” 19th (1944-45), p. 33.

(470a) The Plant Diseases Division of the Plant Research Bureau, New Zealand has found that chloropicrin controls soil nematodes. Trials have been extended to tomato glass-house soils and marked improvement in yield follows the control of nematodes. D-D mixture has given results comparable with chloropicrin.

R.T.L.

471—Report of Director of Abattoir and Live Stock Market Department, Johannesburg.

a. KIRKPATRICK, A. C., 1945.—“Report of Director of Abattoir and Live Stock Market Department.” 1944-45, 11 pp.

(471a) During the year 1st July 1944 to 30th June 1945 the number of animals slaughtered at the Johannesburg Abattoir totalled 903,562. These comprised 189,254 cattle, 37,457 calves, 494,896 sheep etc., and 181,955 pigs. The following were condemned: for cysticercosis 791 bovine carcasses, 8 quarters and 2,203 bovine offals, the carcasses of 7,817 pigs and 9,181 pig offals; for *Cysticercus tenuicollis* the carcasses of one sheep and one pig, and one pig offal; for hydatid one calf and 19 pig carcasses, 146 ox plucks, 141 ox lungs, 133 ox livers, 139 sheep plucks, 7,390 sheep lungs, 12,331 sheep livers, one calf offal, one calf liver and 19 pig offals; for fascioliasis the livers of 14,835 oxen and of 23,567 sheep; for *Oesophagostomum columbianum* the intestines of 39,183 sheep; for onchocerciasis 6 bovine carcasses. The Livestock Market Department continued to insure pigs against condemnation in the abattoir in respect of measly stock consigned to the controlled areas, as the Food Control Organization paid compensation only in respect of slightly infested carcasses which under the Public Health Regulations could, after cold storage, be used for human consumption.

R.T.L.

472—Report. Florida Agricultural Experiment Station.

a. WATSON, J. R. & BRATLEY, H. E., 1945.—“Breeding vegetable plants resistant to root-knot nematodes.” 57th (1944-1945), pp. 64-65.
 b. WATSON, J. R. & BRATLEY, H. E., 1945.—“Effects of mulches on the root-knot nematode.” 57th (1944-1945), p. 65.
 c. EDDINS, A. H., 1945.—“Studies relative to disease control of white (Irish) potatoes.” 57th (1944-1945), pp. 108-109.

(472a) A nematode-resistant strain of Conch cowpea, which was distributed to a number of growers, showed marked resistance to root-knot. “Creole”, a variety of garden pea, showed less injury from root-knot than any other variety. D-D mixture continued to show promise as a soil fumigant: in addition to nematodes, a colony of mole crickets and one of ants were exterminated by it. The fumigant appeared to give an unpleasant flavour to carrots grown 3 feet from the point of application, but the flavour wore off in time. The flavour of strawberries was said to be similarly affected by D-D.

M.T.F.

(472b) It was again shown that a good heavy mulch of any vegetable matter which will decay has a very beneficial effect on plants growing in soil infested with the root-knot nematode. The plants showed a large number of galls, but a larger proportion of healthy roots and a marked improvement in growth. The same effects were produced on various different vegetables.

M.T.F.

(472c) Eddins states that 5% to 10% of the tubers on several fields of potatoes near Hastings, Florida were ruined by root-knot and yields were reduced. Its prevalence in 1945 is attributed to abnormally high temperatures in March and April.

M.T.F.

473—Report of the Hawaii Agricultural Experiment Station.

- a. ANON, 1945.—“Vegetable crops and plant diseases.” Biennium 1942-1944, pp. 13-28.
- b. ANON, 1945.—“Parasitology problems. Studies on the cecal worm (*Subulura brumpti*) of chickens.” Biennium 1942-1944, pp. 105-107.

(473a) *Nematode Resistance* (pp. 17-18): F_2 progenies of a cross between tomatoes, Michigan State Forcing variety and *Lycopersicon peruvianum*, developed into fruitful plants in a field infested with *Heterodera marioni*, whereas the control Bounty plants were stunted and produced only a few undersized fruits. The wild species *L. peruvianum*, which showed resistance to nematode attack, grew normally and had but few galls. Its crosses are usually sterile.

Nematode Control (pp. 25-28): 400 lb. of chloropicrin or of “Shell” D-D mixture were not significantly different, but gave significantly better control than 200 lb. of D-D mixture when used as fumigants on nematode-infested soil in which carrots were grown. The application, in emulsion, of D-D in irrigation water 14 days before planting is not as effective as injections, giving increased yields but without reduction of nematodes. Slight increases in yield and nematode control resulted from increasing D-D dosage from 200 lb. to 400 lb. per acre. There was no significant difference in yield of lettuces from application of D-D at depths of 4, 6 and 8 inches in infested soil.

R.T.L.

(473b) Experimental infection of chicks with beetles harbouring infective larvae of *Subulura brumpti* provided no evidence of the invasion of the caecal wall during any period in the development of the worms, nor was there any inflammatory response where 200-300 worms were present in the caecum. Where there were 400-600 adult worms the caecal wall showed thickening with inflammation of the epithelium. These infections made very little difference in the weight of the growing chicks over a period of five weeks. Beetles became infected with the larvae when allowed to feed on faeces which had been dried for 20 days or for 4 or 7 months indicating the danger of spreading poultry manure as a fertilizer on new areas. The commonest carrier is the beetle, *Alphitobius diaperinus*, to many of which naphthalene was lethal when spread with sand at the rate of 5 gm. per square foot of infected ground under a poultry house.

R.T.L.

474—Report of the Memorial Ophthalmic Laboratory, Giza.

- a. KAMEL, A., 1945.—“Schistosomiasis (bilharziasis) of the conjunctiva.” 14th (1939-1944), pp. 118-123.

(474a) Kamel, who has seen eight cases of bilharzial lesions of the conjunctiva, is of opinion that the eggs are deposited by adult worms in the conjunctival vessels. The clinical appearances are either small yellowish-pink nodules resembling streptothrix nodules, polypoid masses arising from the fornices, or chalazion-like granulomata on the tarsal conjunctiva. Schistosome eggs can be found by rupturing the yellowish dots which occur in the centre of all these varieties. The pre-auricular and submaxillary lymph nodes are not enlarged as in tuberculosis.

R.T.L.

475—Report to the Montana Livestock Sanitary Board.

- a. ANON, 1945.—“Intestinal parasites.” Year 1944-1945, pp. 8-9.

(475a) In eastern Montana *Moniezia expansa*, as well as *Trichostrongylus* spp., is responsible for some of the lamb losses; these, however, were less heavy during 1945 than during the previous ten years. Phenothiazine in salt, 1:9, is recommended for ewes from a month before lambing. For *M. expansa* copper sulphate and nicotine is advised.

R.T.L.

476—Report. South Dakota Agricultural Experiment Station.

- a. ANON, 1945.—“Livestock diseases and poisoning.” 58th (1944-1945), pp. 17-21.

(476a) Of 15 flocks of sheep observed at monthly intervals in the north-western counties of South Dakota, three showed damage from heavy infestation with *Haemonchus contortus* in July. *Trichostrongylus colubriformis* was consistently present in unthrifty and scouring lambs:

it occurred in 39 out of 43 post-mortem examinations and ranged from 50 to 24,000 per lamb, with an average of 3,782. Less frequently present were *Ostertagia circumcincta*, *Nematodirus* sp., *Chabertia ovina*, *Trichuris ovis*, *Strongyloides papillosus*, *Moniezia* sp. and *Thysanosoma actinoides*. None of these contributed materially to the unthriftiness, but *T. actinoides* in the bile ducts led to condemnation of the liver in 13.2% of 701 lambs slaughtered from two ranges.

R.T.L.

477—Repositório de Trabalhos do Laboratório Central de Patologia Veterinária. Lisboa.

- a. PELOURO, J. T., 1945.—“Acerca da patologia, patogenia e terapêutica da esclerostomiasis enzoótica do cavalo.” 6 (1), 23-34.
- b. SILVA LEITÃO, J. L., 1945.—“Administração de tetracloreto de carbono a ovinos.” 6 (1), 153-157. [English, French & German summaries pp. 156-157.]
- c. SILVA LEITÃO, J. L., LINO DE SOUSA, J. M. & BORGES FERREIRA, L. D., 1945.—“Método de Szepeshelyi e Urbányi, no diagnóstico coprológico da distomatose ovina.” 6 (1), 159-164. [English, French & German summaries p. 164.]
- d. SILVA LEITÃO, J. L. & BORGES FERREIRA, L. D., 1945.—“Reacção de Boidin e Laroche no diagnóstico da equinococose porcina.” 6 (1), 165-172. [English, French & German summaries p. 172.]
- e. SILVA LEITÃO, J. L. & BORGES FERREIRA, L. D., 1945.—“Pesquisa de *Trichinella spiralis* p. lo método de Splender.” 6 (1), 173-176. [English, French & German summaries p. 176.]
- f. LINO DE SOUSA, J. M. P., 1945.—“A ascaridiose dos animais domésticos e das aves.” 6 (1), 243-251. [English, French & German summaries p. 251.]

(477a) Transmontano Pelouro discusses the life-history, and changes induced by the larvae, of certain species of “*Sclerostomum*” parasitic in the intestine of equines. Very little is known of the life-cycle of *S. quadridentatum* [= *Strongylus equinus*], but it is known that the larvae of *Strongylus edentatus* are located in various situations, including the serous coat of the intestine and the pancreas where they induce nodular formation. *Sclerostomum bidentatum* [= *Strongylus vulgaris*], a very common species, may even penetrate into the blood vessels in the larval stage. These lesions may later be invaded by bacteria. Nodules in the liver have also been ascribed to larvae of *S. vulgaris* while various pulmonary changes, including nodular formation, have been associated with strongyles. P.A.C.

(477b) Silva Leitão finds that lambs can be given as much as 55 c.c. of carbon tetrachloride without ill-effects, and he has evidence that there is a wide margin of safety above the clinical dose. P.A.C.

(477c) The method of examining faeces described by Szepeshelyi & Urbányi [see Helm. Abs., Vol. III, No. 85b] can be usefully employed for the diagnosis of *Fasciola hepatica* infection in sheep. The method involves centrifuging faeces in an aqueous solution of mercuric iodide in potassium iodide and looping off the surface layers. P.A.C.

(477d) Silva Leitão & Borges Ferreira are of the opinion that the Casoni test is not accurate enough to use in the diagnosis of hydatid disease. Negative results were often obtained with pigs which were found at autopsy to be infested with cysts; some were heavily infested. The authors point out that the test is more properly called the Boidin-Laroche test. P.A.C.

(477e) Trichinelliasis is not known in Portugal, and none was found in the present investigation, when muscular tissue from 13 human cadavers from various parts of the country, from 16 pigs from the Alemtejo province, and from 24 mice from the municipal abattoir of Lisbon, were examined by HCl-pepsin digestion. E.M.S.

(477f) Lino de Sousa records for the first time the occurrence of *Ascaridia columbae* in *Streptopelia risoria*. P.A.C.

478—Res. Buenos Aires.

- *a. MIRABELLI, H. J., 1945.—“Campaña profiláctica contra la hidatosis.” 13 (282), 18139-18140.

479—Revista Argentina de Neurología y Psiquiatría.

*a. BABBINI, R. J., 1945.—“Quiste hidatídico de cerebro; primer caso operado en Rosario.” 10, 217-229.

480—Revista Brasileira de Medicina,

*a. PLANET, N. G., CUOCOLO, R. & ALMEIDA, W. F. DE, 1945.—“Experiências de tratamento das verminoses humanas com a fenotiazina.” 2, 105-110.
 *b. ROCHA E SILVA, M., 1945.—“Alergia ao Ascaris.” 2, 363-372.
 *c. TAVARES, L. & MENEZES, H., 1945.—“Estudo experimental das lesões hepáticas no tratamento da esquistosomíase mansoni, atribuídas aos vermes mortos.” 2, 455-458.
 *d. PINTO, C. & ALMEIDA, A. F. DE, 1945.—“Formas clínicas da esquistosomíase mansoni no Brasil.” 2, 636-652.
 e. PINTO, C., 1945.—“Sobre um foco de esquistosomíase mansoni em culturas de agrião (*Nasturtium officinale*) na cidade de Santos.” 2 (10), 820-823. [English summary p. 823.]
 f. PAES DE OLIVEIRA, P., 1945.—“Helmintíase e anemia no meio militar.” 2 (10), 835-839. [English summary p. 839.]
 g. PINTO, C. & ALMEIDA, A. F. DE, 1945.—“Epidemiologia da esquistosomíase mansoni no Brasil.” 2 (11), 912-918. [English summary p. 917.]
 h. PINTO, C. & ALMEIDA, A. F. DE, 1945.—“Distribuição geográfica e freqüência do *Schistosoma mansoni* no Brasil.” 2 (12), 1000-1008. [English summary p. 1007.]

(480b) Extracts of *Ascaris lumbricoides* which have been dialysed and deproteinized are capable of producing anaphylactic shock in dogs when introduced intravenously. The shock was probably due to a spontaneous sensitization caused by the presence of parasites in the intestine. Perfusion of the liver with defibrinated blood plus Ascaris extract does not bring about discharge of histamine. Rocha e Silva, therefore, suggests that platelets and leucocytes have some function in producing shock. These are much reduced after injection of extract, as they are after injection of glycogen from dog liver, though in the latter case there is no induced shock. Further, in perfusion experiments with total citrated blood, they are retained by the liver cells as soon as Ascaris extract is injected. At the same time there is some discharge of histamine. [From an annotation in *J. Amer. med. Ass.*, 129 (6), 473-474 (1945).] P.A.C.

(480c) Pinto reports the presence of a focus of Schistosomiasis mansoni in water-cress beds in Santos, arising from pollution of the water with human faeces containing eggs of the parasite. *Australorbis glabratus* was found in large numbers, even during the winter. E.M.S.

(480g) Schistosomiasis mansoni in Minas Geraes occurs particularly in persons handling certain economic plants, such as “guaxima” (*Urena lobata*), and in persons bathing in swimming pools built without regard to their suitability as breeding grounds for the snail intermediary, *Australorbis glabratus*. Approximately 90% of *A. glabratus* examined in various districts contained the cercariae. E.M.S.

(480h) Schistosomiasis is becoming more widespread throughout Brazil, as shown by 198 foci recorded in 19 states, chiefly in the north-east and in Minas Geraes. It is estimated that there are 2,000,000 infected persons. No adequate control scheme has yet been organized.

E.M.S.

481—Revista Clínica Española.

a. MIRANDA, A. G., 1945.—“Cisticero de retina. Extracción del mismo.” 16 (1), 40-41.
 b. FRESCO, M. G., 1945.—“Un caso de filariosis.” 16 (2), 106-108.
 c. CABAL, M., 1945.—“El esputo salado como síntoma de hidatidosis pulmonar.” 16 (2), 108-109.

482—Revista dos Criadores. São Paulo.

*a. D'APICE, M., 1945.—“O combate às verminoses dos suínos pelo sistema MacLean.” 16 (6), 20-22.

483—Revista Española de Cirugía, Traumatología y Ortopedia.

- a. BENGOCHEA, J. G., 1945.—“El hidatidoma pericárdico (cooperación al diagnóstico y tratamiento quirúrgico.)” 2 (11), 277-292.
- b. BOSCH AVILÉS, L., 1945.—“Colehidatoperitoneo agudo de origen traumático.” 2 (12), 361-365.

484—Revista de la Facultad de Medicina. Bogotá.

- a. BONILLA NAAR, A., 1945.—“Ciclo evolutivo de la *Trichinella spiralis*.” 13 (8), 723.
- b. BONILLA NAAR, A., 1945.—“Ciclo evolutivo del *Trichocephalus trichiurus*.” 13 (8), 724.
- c. BONILLA NAAR, A., 1945.—“Ciclo evolutivo del *Ascaris lumbricoides*.” 13 (8), 725.
- d. BONILLA NAAR, A., 1945.—“Ciclo evolutivo del *Enterobius vermicularis*.” 13 (8), 726.
- e. BONILLA NAAR, A., 1945.—“Esquema anatomico y funcional de un trematode.” 13 (9), 865.
- f. URUETA, C. A., 1945.—“Alergia y parasitosis intestinal.” 13 (10), 931-932.
- g. BONILLA NAAR, A., 1945.—“Ciclo evolutivo del *Fasciolopsis buski*.” 13 (10), 959.

485—Revista de Gastro-Enterología de México.

- *a. OTTOLINA, C. & ATENCIO M., H., 1945.—“Nuevos caminos para el diagnóstico clínico preciso de la schistosomiasis mansoni.” 10, 13-44.

(485a) [See also Helm. Abs., Vol. XII, No. 404e, and below, No. 497i.]

486—Revista Ibérica de Parasitología.

- a. LÓPEZ-NEYRA, C. R., 1945.—“Compendio de helmintología ibérica. (Continuación.)” 5 (1/2), 121-151; (3), 213-224.
- b. LÓPEZ-NEYRA, C. R. & SOLER PLANAS, M. DE LOS ANGELES, 1945.—“Compendio de helmintología ibérica.” [Bibliography of human hydatidosis.] 5 (3), 225-259.
- c. LÓPEZ-NEYRA, C. R., 1945.—“Estudios y revisión de la familia Subuluridae, con descripción de especies nuevas.” 5 (4), 271-329.
- d. COVALEDA ORTEGA, J. & GÁLLEGUO BERENGUER, J., 1945.—“Sobre algunas microfilarias sanguíneas de aves en España, con descripción de una especie nueva.” Tomo Extraordinario, pp. 15-34. [French summary pp. 32-33.]
- e. SÁNCHEZ CÓZAR, J., 1945.—“Equinococosis hepática.” Tomo Extraordinario, pp. 35-66.
- f. SOLER, M. DE LOS ANGELES, 1945.—“El género *Nematotaenia* y descripción de una nueva especie.” Tomo Extraordinario, pp. 67-72.
- g. GONZÁLEZ CASTRO, J., 1945.—“*Notocotylus neyrai* n.sp., parásito cecal del *Arvicola sapidus*.” Tomo Extraordinario, pp. 127-149. [French summary pp. 145-146.]
- h. BALLESTEROS MÁRQUEZ, A., 1945.—“Revisión de la familia Cosmocercidae, Travassos, 1925.” Tomo Extraordinario, pp. 150-180.
- i. CLÁVERA, J. M. & MALLÓL, A., 1945.—“La composición química de los áscaris del hombre y del cerdo.” Tomo Extraordinario, pp. 195-202.
- j. SERRANO SÁNCHEZ, A., 1945.—“*Hammerschmidtiella neyrai* n.sp. en *Periplaneta orientalis* L., en Granada.” Tomo Extraordinario, pp. 213-215.
- k. MUÑOZ MEDINA, J. M., 1945.—“Algunos helmintos libres y fitoparásitos de la región granadina.” Tomo Extraordinario, pp. 246-250.
- l. GUEVARA POZO, D., 1945.—“Cestodes del género *Dinobothrium*, parásitos de grandes salmíos, pescados en las costas españolas.” Tomo Extraordinario, pp. 260-270.
- m. TORRES LÓPEZ, A. J., GONZÁLEZ CASTRO, J. & SÁNCHEZ JIMÉNEZ, R., 1945.—“Sobre un caso de parasitismo por *Fasciola hepatica*.” Tomo Extraordinario, pp. 271-275.
- n. GÁLLEGUO BERENGUER, J., 1945.—“*Atractis emiliae* n.sp.” Tomo Extraordinario, pp. 276-284.
- o. GUEVARA POZO, D. & GALDÓ VILLEGAS, A., 1945.—“Consideraciones a propósito de un caso de teniasis múltiple por *Taenia solium* en un niño.” Tomo Extraordinario, pp. 285-294.
- p. MUÑOZ FERNÁNDEZ, E. & SAUCEDO ARANDA, R., 1945.—“Acción intestinal de cestodes. (Nota previa).” Tomo Extraordinario, pp. 312-315.
- q. HERNÁNDEZ LÓPEZ, E. & DOMÍNGUEZ MARTÍNEZ, J., 1945.—“Apendicitis y oxiuros.” Tomo Extraordinario, pp. 316-338.

(486c) López-Neyra reviews the Subuluridae and considers it can be subdivided into 5 subfamilies: Hoplodontophorinae, Subulurinae, and 3 new ones—Heteroxyneminae.

Numidinae and Maupasininae. He creates the genera *Travassallodapa* n.g. to accommodate those species of *Subulura* which have a gubernaculum and unequal spicules, and *Baylisnumidica* n.g. for the odd species *Numidica petrodomi*. Three new species are described: *Travassallodapa glaucidii* n.sp. from *Glaucidium passerinum* has large cervical papillae and distinctive spicules; *Subulura coturnicis* n.sp. from *Coturnix coturnix* can be distinguished by the small spicules and eggs, by its large gubernaculum and by the possession of 12 pairs of caudal papillae; *S. gallopavonis* n.sp. from *Meleagris gallopavo* can be recognized by its short oesophagus, by the length of the tail and by the size and shape of the spicules and gubernaculum. P.A.C.

(486d) Microfilariae considered to be those of *Eulindama clava* were found in *Streptopelia turtur*, constituting a new host record. Microfilariae of *Eusilaria sergenti* were found in *Serinus serinus*; *Mf. hispalensis* Vich & Rey, 1938 is referred to this species. Microfilariae found in *Carduelis carduelis*, provisionally designated *Mf. neyrae* n.sp., may prove to be the larvae of *Diplotriaena affinis*. E.M.S.

(486f) Specimens of *Nematotaenia* found in a *Bufo* sp. resemble neither *N. dispar* nor *N. tarentolae*. They agree in some respects with *N. jägerskiöldi*, but cannot be identified with the genus *Baeretta* to which the latter species was referred by Hsü in 1935. They are therefore designated *N. lopezneyrai* n.sp. E.M.S.

(486g) *Notocotylus neyrai* n.sp., from *Arvicola sapidus* examined in Granada, is described and figured. E.M.S.

(486h) Ballesteros Márquez considers the presence or absence of a gubernaculum and the possession of one or two spicules in the male, and the prodelphous or amphidelphous disposition of the uteri in the female, to be valid generic characters for the Cosmocercidae. On this basis he revises the family, creating three new genera, viz. (i) subfamily Cosmocercinae, *Neyraplectana* n.g. for *Aplectana* with prodelphous females, males with two spicules and no gubernaculum (type *N. crucifera* n. comb., containing also *N. vellardi* n. comb., *N. schneideri* n. comb., *N. pintoi* n. comb., *N. linstowi* n. comb.); (ii) *Neoxysomatium* n.g. (Oxysomatinae) for *Oxysomatium* with amphidelphous females, males with two long spicules, gubernaculum present (type *N. brevicaudatum* n. comb., containing also *O. contortum*), and (iii) *Neorailletnema* n.g. (Oxysomatinae) for amphidelphous *Railletnema*, eggs ranged linearly i.e. *utero*, males with two long spicules, gubernaculum absent (type *N. preputialis* n. comb.). The genera *Alaplectana* Azim, 1931 and *Latibuccana* Patwardhan, 1935 are included in the Cosmocercinae. A dichotomous key is provided for the separation of all the genera of the family as revised. E.M.S.

(486i) Two large lots of *Ascaris*, one from man and one from swine, were analysed chemically with the following results respectively:—total dry matter, 78.25% and 85.85%; containing ash 3.68% and 2.83%, calcium (as CaSO_4) 0.55% and 0.19%, fats 5.36% and 1.75%, nitrogen 10.23% and 9.75%. E.M.S.

(486j) *Hammerschmidtella neyrai* n.sp. from cockroaches in Granada, is distinguished from *H. diesingi* by its considerably larger size, by the form of the oesophagus in the male and by the much smaller ratio between the total length and the length of the caudal prolongation in both sexes. E.M.S.

(486k) Muñoz Medina records the finding of a variety of free-living and saprophytic eelworms in soil adherent to the roots of various plants in Granada. *Anguillulina tritici* was found associated with wheat. E.M.S.

(486l) Guevara Pozo has re-examined specimens, identified by López-Neyra as *Dinobothrium septaria*, from *Cetorhinus maximus* in Santander and now finds that they agree with *D. plicatum* Linton. Seven new specimens from the same host taken off Majorca proved to be mainly *D. planum*, with one specimen only of *D. plicatum*. E.M.S.

(486n) *Atractis emiliae* n.sp. from *Testudo graeca* is described and distinguished from related species. It is the second species described from this host. E.M.S.

(486p) Specimens of *Moniezia* (chiefly *M. expansa*) recovered from lambs were maintained alive in Tyrode's solution at 37°-38°C. for 6-24 hours. The liquid was then filtered, and refrigerated until its effect could be tested on the motility and tonus of isolated segments of rabbit or guinea-pig intestine. Freshly prepared solutions were found to increase the peristalsis but reduce the tonus of intestinal muscle, this effect being evident even when the muscle was previously paralysed by adrenalin. Poorly preserved solutions, on the other hand, reduced both peristalsis and tonus, and this was considered to be due to breakdown of the original toxins.

E.M.S.

487—Revista Industrial y Agrícola de Tucumán.

- a. FAWCETT, G. L., 1945.—“Notas sobre la podredumbre de las raicillas o ‘tristeza’ de los naranjos.” 35 (1/3), 33-35.

(487a) Fawcett discusses the “tristeza” or rootlet rot of orange trees which occurs in Tucumán, and with which the citrus root eelworm, *Tylenchulus semi-penetrans*, is associated. He concludes that there is no better explanation of it than that it is due to a virosis, the symptoms of which only become visible when the plant carrying the virus is grafted on sweet orange stock.

T.G.

488—Revista do Instituto Adolfo Lutz. São Paulo.

- *a. LEÃO DE MOURA, S. A., 1945.—“Schistosomose mansoni autóctone em Santos.” 5, 279-311.

489—Revista Médica de Chile.

- a. NEGHME R., A., 1945.—“Parasitosis y síndrome de Loeffler.” 73 (4), 336-339.
- b. VALDIVIESO, R. & SEPULVEDA, G., 1945.—“Equinococcosis del corazón.” 73 (6), 522-527.

(489a) Patients showing Loeffler's syndrome, i.e. fever, eosinophilia and pulmonary infiltration, should be considered as possible carriers of helminths, in particular of *Ascaris lumbricoides*. A detailed examination should include a number of faecal examinations for helminth eggs as well as subcutaneous and intradermal tests with an Ascarisan tigen. Neghme stresses the fact that the output of helminth eggs is not constant and stools of infested patients may at times contain no eggs, hence the need for repeated examination. Moreover, infestations may consist entirely of male worms or of immature forms, neither of which will show eggs in the stool.

P.A.C.

490—Revista Médica de Costa Rica.

- *a. PEÑA CHAVARRÍA, A., PIEDRA BLANCO, R., SÁENZ HERRERA, C. & CORDERO CARVAJAL, E., 1945.—“Influencia de la acidez gástrica en el metabolismo del hierro de las anemias secundarias graves de la malaria y anquilostomiasis del niño.” 6, 383-389.
- *b. PEÑA CHAVARRÍA, A., PIEDRA BLANCO, R. & SÁENZ HERRERA, C., 1945.—“La punción esternal como sencillo medio de diagnóstico en pediatría; cambios de mielograma en las anemias graves de origen anquilostomíatico y palúdico.” 6, 564-571.

491—Revista Médica Panamericana. Pernambuco.

- *a. TAVARES, L., 1945.—“Notas sobre a cólica filariótica.” 1, 327-333.
- *b. TAVARES, L., 1945.—“A microcinematografia no estudo da esquistosomíase mansoni experimental.” 1, 391-395.
- *c. MONOD, O., 1945.—“Kyste hydatique du médiastin postérieur—ablation extra-pleurale—guérison par première intention.” 1, 474-475.

492—Revista Médica de Pernambuco.

- *a. GAIÃO, N. & GUEIROS, H., 1945.—“Mola hidatiforme com suspeita de degeneração corioepiteliomatosa, associada a quistosoma de Manson, com localização ovariana.” 15, 42-48.

493—Revista de Medicina y Cirugía de la Habana.

- *a. CALVO FONSECA, R., 1945.—“El parasitismo intestinal, una de las causas de desnutrición.” 50, 11-16.

494—Revista de Medicina Veterinaria. Buenos Aires.

a. CANO, E. A., 1945.—“La estrongilosis gastro-intestinal en los ovinos y su tratamiento con fenotiazina.” 27 (5/6), 245-287.

(494a) In a veterinary thesis, Cano describes his experiences with phenothiazine in a flock of 700 sheep heavily infested with *Haemonchus*, *Trichostrongylus* and *Dictyocaulus*, and in another flock of 3,000 head carrying in addition *Ostertagia*, *Nematodirus* and *Moniezia*. Phenothiazine was given in suspension in three doses at intervals of three days, adult sheep receiving a total of 24 gm., yearlings 18 gm. and lambs 12 gm. *Moniezia* was controlled by the prior administration of copper and nicotine sulphates. These treatments, repeated when necessary and combined with removal of the flocks to clean pastures, gave satisfactory control of the outbreaks, as shown by egg counts and reduced losses.

E.M.S.

495—Revista Paulista de Medicina.

*a. BIANCO, A., 1945.—“Sobre um caso de elefantiasi filariana.” 27, 31-43.

496—Revista de la Policlínica Caracas.

a. SANABRIA, A. & BENAÍM PINTO, H., 1945.—“Consideraciones sobre el corazón en la anquilostomiasis.” 14 (83), 294-324.
b. RINCÓN URDANETA, A., 1945.—“La biopsia rectal como prueba diagnóstica de la bilharziosis Mansoni.” 14 (83), 325-344.

497—Revista de Sanidad y Asistencia Social. Venezuela.

*a. MAYER, M. & PIFANO C., F., 1945.—“El diagnóstico de la schistosomiasis por intradermorreacciones con un antígeno preparado de vermes adultos de *Schistosoma mansoni* (estudio fundamentado en 5,000 intradermorreacciones).” 10 (1), 3-44.
*b. MAYER, M. & PIFANO C., F., 1945.—“Intradermorreacciones comparativas con extracto de *Schistosoma mansoni* y *Fasciola hepatica* en el diagnóstico de la bilharziosis.” 10 (1), 45-49.
*c. GUERRA, P., MAYER, M. & PRISCO, J. D., 1945.—“La especificidad de las intradermorreacciones con antígenos de *Schistosoma mansoni* y *Fasciola hepatica* por el método de Prausnitz-Küstner.” 10 (1), 51-63.
*d. MAYER, M. & PIFANO C., F., 1945.—“La reacción de desviación del complemento, según Fairley, en la schistosomiasis mansoni; estudio fundamentado en 1,932 reacciones.” 10 (1), 65-93.
*e. JAFFÉ, R., MAYER, M. & PIFANO C., F., 1945.—“Estudios biológicos y anatomo-patológicos en animales infectados con un solo sexo de *Schistosoma mansoni*.” 10 (1), 95-106.
*f. LUTTERMOSER, G. W. & CASTELLANOS, J. V., 1945.—“Observaciones sobre la propagación y la destrucción del caracol, *Australorbis glaberratus* Say, 1818, vector de *Schistosoma mansoni* (Bilharzia) en El Valle, D.F.” 10 (1), 109-148.
*g. LUTTERMOSER, G. W., 1945.—“Estudios sobre el caracol vector del *Schistosoma mansoni* en la ciudad de Maracay y alrededores (estado Aragua), con recomendaciones para luchar contra él.” 10 (1), 149-163.
*h. MAYER, M., LUTTERMOSER, G. W. & PIFANO C., F., 1945.—“Investigaciones diagnósticas sobre la schistosomiasis mansoni en la ciudad de Maracay y alrededores inmediatos (estado Aragua).” 10 (1), 165-174.
*i. OTTOLINA, C. & ATENCIO M., H., 1945.—“Nuevos caminos para el diagnóstico clínico preciso de la schistosomiasis mansoni.” 10, 185-215.
*j. JAFFÉ, R., 1945.—“Parasitosis intestinal como causa de muerte en Venezuela.” 10 (2), 283-292.
k. OLIVEROS NAVA, B., 1945.—“Estudio estadístico del Servicio Antibilharziano de El Valle ‘Centro de Educación Sanitaria’.” 10 (5/6), 667-686.
(497i) [See also Helm. Abs., Vol. XII, No. 404c, and above, No. 485a.]

498—Revista de Sanidad e Higiene Pública, Madrid.

a. CLAVERO, G., 1945.—“Filariasis en las Fuerzas Armadas Americanas del Pacífico.” 19 (12), 904-907.

(498a) This is a brief review of some of the many publications that have appeared on the subject since Dickson diagnosed Filariasis bancrofti among American fighting men in 1943.

P.A.C.

499—Revista de la Sociedad Argentina de Biología.

a. BACIGALUPO, J., 1945.—“*Diancyrobothriidae*, nueva familia del orden Seudo-phyllidea.” 21 (4), 383-392. [English summary pp. 391-392.]

(499a) A tapeworm evacuated by a Polish patient following anthelmintic treatment possessed an unarmed scolex bearing two anchor-shaped bothridia. The proglottides resemble those of a *Taenia*. The parasite is made the type of *Diancyrobothrium taenioides* n.g., n.sp., and a new family *Diancyrobothriidae* is created to receive it. E.M.S.

500—Revista Sudamericana de Morfología. Buenos Aires.

*a. SCHWARZ, J., 1945.—“*Oxiuris y apendicitis.*” 3, 110-116.

501—Revista de Tuberculosis del Uruguay.

a. PIAGGIO BLANCO, R. A. & CANABAL, E. J., 1945.—“*Neumoquiste hidático insuflado.*” 13 (3), 303-308.

502—Revue Neurologique.

a. BERTRAND, I., GUILLAUME, J. & FEDER, A., 1945.—“*Cysticercose racémuse à localisation spinale.*” 77 (5/6), 134-135.

503—Revue de Pathologie Comparée et d'Hygiène Générale.

a. BRUMPT, L. C., 1945.—“*Le parasitisme chez les jeunes.*” 45, 161-163.
b. CHARTON, A., 1945.—“*Le parasitisme des jeunes.*” 45, 164-176.

504—Revue des Produits Chimiques.

a. FRYDLENDER, J. H., 1945.—“*L'industrie chimique au service de l'agriculture. Progrès réalisés dans le domaine des parasiticides.*” 48 (13/14), 97-102.

505—Royal Melbourne Hospital Clinical Reports.

a. MACKAY, I. R., 1945.—“*Mediastinal cyst, probably hydatid, causing a fatal haematemesis.*” 16, 72-74.

506—Rural New Yorker.

*a. DUCK, R. W., 1945.—“*Preventing and treating pig parasites.*” 104, 444

507—Salubridad y Asistencia, Mexico.

*a. VARGAS, L., 1945.—“*Notas sobre la oncocerciasis ; algunas consideraciones epidemiológicas.*” 2 (7), 57-69.
*b. PUIG SOLANES, M., FONTES, A. & QUIROZ, J. A., 1945.—“*Investigación oftalmológica en la zona oncocercosa de Chiapas.*” 2 (10), 69-96.

508—Sang.

a. LAVIER, G., 1945.—“*L'éosinophilie sanguine dans les helminthiases.*” 16 (8), 510-528.

(508a) Lavier discusses the genesis and nature of helminthic eosinophilia. The dominating factor is the time passed since infection ; there is a latent period, an abrupt increase and a slow decline. The proportional duration of these stages may vary with the species concerned. The latent period increases with the size of the host ; the degree of eosinophilia varies with the intensity of the infection. The eosinophile curve is correlated with the first appearance of eggs and with the longevity of the parasite. The duration of the eosinophilia does not correspond exactly with the duration of the infection. Certain non-helminthic factors, drug treatment and reinfection, which influence the eosinophile level, are discussed. R.T.L.

509—São Paulo Médico.

*a. RALMO, L. & KRYNSKI, S., 1945.—“*Cisticercose cerebral—a proposito de um caso.*” Year 1945, 1, 312-324.

510—Schweizerische Zeitschrift für Pathologie und Bakteriologie.

a. REGAMEY, R., 1945.—“Epiphytisme, parasitisme et symbiose chez les vertébrés et notamment chez l'homme.” 8 (6), 489-502.

511—Sheep and Goat Raiser.

*a. FAUKS, C. H., 1945.—“Reducing sheep losses by disease and parasite control.” 25 (5), 16-19.

512—Shorthorn World.

*a. HARWOOD, P., 1945.—“Phenothiazine-salt mixture.” 30 (13), 37.

513—Sinensis. Contributions from the Institute of Zoology, Academia Sinica.

a. KUNG, C. C. & WU, H. W., 1945.—“Parasitic nematodes of amphibians from Pehpei, Szechwan, China.” 16 (1/6), 73-83.

(513a) Some hundred frogs and toads belonging to five species, collected in Pehpei, were examined for parasitic nematodes. *Rhabdias globocephala* n.sp. is described from the lungs of *Microhyla ornata*. *Paracosmocerca mucronata* n.g., n.sp. (Oxyuridae: Cosmocercinae) occurred most frequently of all the species observed, being found in 80% of *Bufo bufo asiaticus* and *Rana guentheri*, in 79% and 76% respectively of *Rana limnocharis* and *Rana nigromaculata*, and in 34% of *Microhyla ornata*. The new genus is distinguished from *Cosmocercella* by having no bursa and no gubernaculum, and from *Cosmocerca* in having fewer plectanes and the presence of lateral flanges; it has a single broad spicule. Other species found were *Rhabdias bicornis*, *R. nipponica*, *Cosmocercoides pulcher*, *Spinicauda japonica*, *Oswaldocruzia hoeplii*, and *Spiroxys japonica*.

E.M.S.

514—Southern Medical Journal.

a. BUTLER, F. A. & SAPERO, J. J., 1945.—“Postwar tropical disease problems in the United States.” 38 (7), 459-467.
 b. HUDSON, P. L., 1945.—“Echinococcus disease: report of three cases of calcified cysts of the liver.” 38 (9), 584-589.

(514a) Among the tropical diseases discussed are Pacific filariasis and Asiatic schistosomiasis. It is felt that there is no cause for alarm regarding postwar morbidity from tropical diseases in the civilian population of U.S.A. but if America is to have vast global postwar commitments and responsibilities, tropical diseases may assume great economic and political importance.

R.T.L.

(514b) Hydatid disease is commonly considered to be rare in native-born Americans. Hudson, however, suggests that it may have been overlooked as he has recently found calcified hydatids in 3 cases in native-born Georgians. It is common in pigs and cattle as well as in sheep in Georgia. He also suggests that the infection may occur in recently returned troops, and that the “black market” may provide an additional source of infection for dogs and cats as the meat so purchased escapes inspection.

R.T.L.

515—Stock and Land. Melbourne.

a. GORRIE, C. J. R., 1945.—“Hair worm in calves prevented by suitable drenching.” 35 (28), 3.

516—Suelo Argentino.

a. PIRES, A., 1945.—“Dos enfermedades parasitarias de los animales que pueden transmitirse al hombre.” 4 (39), 150-151.
 b. GALOFRE, E. J., 1945.—“Algunas enfermedades parasitarias de las aves. Diagnóstico y tratamiento.” 4 (40), 248-249, 268.

(516a) This article deals in a general way with trichineliiasis and hydatid disease and recapitulates the classic methods of prevention.

P.A.C.

(516b) In an article concerned mostly with spirochaetosis and coccidiosis in chickens, Galofre mentions that the birds may be parasitized by cestodes and nematodes and that faecal examinations will demonstrate the presence of such infestations. Possible treatments are briefly indicated.

P.A.C.

517—Suomen Eläinlääkarilehti. (Finsk Veterinärtidskrift.)

*a. ANON, 1945.—[Parasites of domestic animals found during meat inspection.] 51, 62-64.

518—Terre Marocaine.

*a. ZOTTNER, 1945.—“Observations sur l’emploi de la phénothiazine comme antihelminthique au Maroc.” 15 (183), 6-8.

519—Tierärztliche Zeitschrift.

a. WETZEL, R., 1945.—“Ueberwintern die ansteckungsfähigen Larven des grossen Lungenwurms und der Magenwürmer der Schafe auf der Weide?” Year 1945, No. 1, pp. 7-9.

(519a) Wetzel has carried out a field experiment to determine whether certain helminths of sheep can survive the winter on pasture. Sheep known to be infected with *Dicyocaulus filaria*, *Haemonchus contortus*, *Ostertagia* and *Trichostrongylus* spent the whole of September 1943 in a meadow (sandy soil): in addition certain areas of the meadow were given a heavy artificial infection with the same species. Grass and soil samples taken in October showed larvae of all four genera to be present. The meadow was rested until May 1944 when further samples were taken. *D. filaria* was absent, *H. contortus* only present in the artificially infected areas and in very small numbers, whilst *Ostertagia* and *Trichostrongylus* were found everywhere, though in small numbers. Winter temperatures varied between 16°C. and -2°C., and there was frost on 86 days. Wetzel concludes that overwintering of larvae plays a very minor part in re-infecting pasture, and stresses the importance of anthelmintic treatment of sheep before they are put out to pasture in the spring.

A.E.F.

520—Tijdschrift voor Diergeneeskunde.

- BEIJERS, J. A. & RAADSHOOVEN, F. H. VAN, 1945.—“Strongyliden bij het paard en de kleine herkauwers. Klinische en therapeutische ervaringen met name van phenothiazine.” 70 (4), 7-22.
- ABRAHAMSE, A. A., 1945.—“Het nieuwe antiparasiticum phenothiazine en de toepassing er van bij de strongylosis van het paard.” 70 (4), 23-29.
- TENHAEFF, C. & FERWERDA, S., 1945.—“25 jaar bestrijding van de echinococose in de provincie Friesland.” 70 (6), 84-95.
- TENHAEFF, C., 1945.—“Een geval van echinococcosis bij den mensch.” 70 (6), 96-99.

(520a) Beijers & Raadshooven list the important horse strongyles and describe the clinical signs of infection. Treatment with carbon tetrachloride, chenopodium oil, Allegan and phenothiazine showed the two last to be the most effective anthelmintics, especially against *Trichonema*. Phenothiazine in a dose of 0.1 gm. per kg. body-weight, suspended in sodium taurocholate solution as wetting agent, gave rise to no ill-effects but was of no value against *Parascaris* or *Oxyuris*. Given in a dosage of 0.5 gm. per kg. body-weight following milk or copper sulphate solution, phenothiazine was much less effective in sheep and goats: there was some success against *Haemonchus* [no details are given] but little or no effect on trichostrongyles.

A.E.F.

(520b) Abrahamse's experiments in six foals and horses show that phenothiazine is practically 100% effective against horse strongyles. The optimal dose for foals is stated to be 30 gm. and for adult horses 40 gm. No difficulty was experienced in administering the drug and no untoward effects were observed. The fact that the effective therapeutic dose is considerably lower than the minimum lethal dose makes phenothiazine a very safe anthelmintic. A.E.F.

(520c) In Friesland a noticeable decline in the incidence of hydatid in man and animals has followed the imposition of legal restrictions on the disposal of infected organs at abattoirs, and the dissemination to the public of information on prevention. The pig is regarded as the most reliable index of infection in dogs. A number of useful graphs accompany the text. R.T.L.

521—Trabajos del Centro de Investigaciones Científicas, Caracas.

- *a. VOGELSANG, E. G. & FERNÁNDEZ, A. J., 1945.—“Caso de poliparasitismo simultáneo por *T. saginata* y *T. solium*.” No. 3, pp. 111-115.
- *b. VOGELSANG, E. G., 1945.—“Triquinosis en Venezuela.” No. 3, pp. 147-150.

522—Transactions of the Connecticut Academy of Arts and Sciences.

- a. KATSON, B. J., 1945.—“Notes on nematode parasites of spiders.” 36, 241-244.

(522a) Katson records the occurrence of larval mermithid nematodes in spiders which had been collected and preserved in alcohol. A young spider, *Xysticus funestus*, contained a specimen of *Hexameris* sp., and five specimens of the spider, *Phidippus clarus*, were found containing developing examples of *Agameris decaudata*. In both cases the identifications were made by Thorne. T.G.

523—Transactions of the Kansas Academy of Science.

- a. ACKERT, J. E., BRANSON, D. S. & AMEEL, D. J., 1945.—“Effect of an all plant ration on the resistance of an omnivorous animal to parasitism.” Year 1944-1945, 47 (2), 215-218.

(523a) Soybean oil meal is as effective a supplement as meat scrap and skim milk in producing resistance to *Ascaridia galli* in chickens fed with a cereal basic diet. P.A.C.

524—Transactions of the North American Wildlife Conference.

- a. HERMAN, C. M., 1945.—“Deer management problems as related to diseases and parasites of domestic range livestock.” 10th, pp. 242-246.

(524a) A large number of deer in the coastal regions of California die annually from gastro-intestinal helminths. The control of these infections is a problem of range or forage management, the solution being to persuade the yearling deer to take to browsing entirely and to keep them away from grazing pastures infected by sheep. Mortality in animals past maturity is less important than among immature stock. Artificial propagation of browse species and restocking of certain plants on a large scale in deer areas may prove valuable. Most of the parasites originate from livestock but as infected deer act also as a reservoir of infection for livestock, wildlife management by conservation agencies to control the condition of deer should prove of benefit to both the livestock and the deer. R.T.L.

525—Urologic and Cutaneous Review.

- a. MARTÍNEZ BÁEZ, M., 1945.—“Onchocerciasis.” [Paper presented at Conference in Tropical Dermatology for American Doctors, Mexico City, August 6-18, 1945.] 49 (12), 760-765.

526—Veterinariya.

- a. IVASHKIN, V. M., 1945.—[Treatment of calves infested with *Dictyocaulus viviparus* by iodine injections into both lungs.] 22 (8/9), 44. [In Russian.]
- b. PENKOV, 1945.—[Experimental breeding of calves free from *Dictyocaulus viviparus*.] 22 (8/9), 44. [In Russian.]
- c. KHODORKINA, 1945.—[Intestinal obstruction in a horse caused by haematoma of *Strongylus vulgaris* origin.] 22 (8/9), 44-45. [In Russian.]

(526a) This short note describes the operation whereby a solution of iodine is injected simultaneously into both lungs of calves infested with *Dictyocaulus viviparus*, but this treatment is not advised at a late stage of infestation. C.R.

(526b) Penkov states that nearly 100% of the cattle on the farms in his district were infested with *Dictyocaulus viviparus* with a mortality rate of 50%. By grazing the calves in summer on special pastures where adult cattle had not previously grazed, the infestation was greatly reduced. C.R.

(526c) A post-mortem examination was made of a horse which had suffered from symptoms of intestinal obstruction. On examination of the intestine, a broken haematoma was discovered which had been the cause of the obstruction. Inside the haematoma were found larvae of *Strongylus vulgaris*. C.R.

527—Veterinary Journal.

a. LANG, W. W., 1945.—“Impaction of the caecum.” 101 (7), 154-156.

(527a) From a study of 100 consecutive autopsies on cart-horses, Lang is of the opinion that circulatory damage to the anterior mesenteric artery by the larvae of *Strongylus vulgaris* is the probable cause of colic. He recommends the administration of “12 gallons of water plus medicinal agents” to flush out the bowel. Another useful line of treatment is the slow intravenous injection of common salt and sodium citrate, one or two pints of 5% each. This has also a lasting effect owing to the decalcification by the sodium salts of the fibrous tissues formed as a result of verminous thrombosis. J.W.G.L.

528—Videnskabelige Meddelelser fra Dansk Naturhistorisk Forening i København.

a. WESENBERG-LUND, E., 1945.—“Some remarks on *Contortospiculum horrida* (Diesing 1851).” 108, 89-94.

(528a) In 1843 Owen found in *Rhea americana*, but did not describe fully, a *Filaria* sp. which Yorke & Maplestone in 1926, and Sprehn in 1932, have called *Contortospiculum rheae*. It is undoubtedly the same as *Contortospiculum horrida* (Diesing, 1851) Skryabin, 1917. The parasite is now redescribed and illustrated. R.T.L.

529—Vlaamsch Diergeneeskundig Tijdschrift.

a. THOONEN, J. & GREMBERGEN, G. VAN, 1945.—“Trichostrongylose bij geiten.” 14 (3/4), 22-27. [English, French & German summaries p. 27.]

b. GREMBERGEN, G. VAN, 1945.—“Over *Strongyloides* bij het varken.” 14 (7/8), 45-55. [English, French & German summaries pp. 54-55.]

(529a) Of ten goats which had succumbed to helminthiasis, eight had massive infections with Trichostrongylidae. The parasites present were *Trichostrongylus axei* in five cases, *Nematodirus filicollis* in one case, and *Haemonchus contortus* in two cases. *T. axei* is the chief cause of fatal gastro-enteritis in goats. R.T.L.

(529b) Strongyloides infection of the pig is now reported for the first time in Belgium. The parasite resembled *S. ransomi* and gave rise to cachexia in a pig four months old. R.T.L.

530—Western Tobacco Journal.

a. KING, G. H., 1945.—“Control of root knot in plant beds.” 72 (17), 8, 17.

(530a) King discusses methods for the control of the root-knot nematode *Heterodera marioni*, in soils devoted to tobacco growing in Georgia. He recommends a combination of 1 lb. of uramon and $\frac{1}{2}$ lb. of cyanamide per square yard of soil. The substances are distributed on the soil surface at the prescribed rates and thoroughly disced in, preferably three months before seed sowing. Crop rotations are recommended, but where runner peanuts and crotalariae are grown the soil may become very rich in nitrogen, and then some non-legume crop should precede the tobacco crop. He also recommends the ploughing out of the tobacco stalks at the end of the season and the use of peanut hay and pine straw placed deep in furrows which are then covered with soil and left for tobacco planting over the straw the following season. T.G.

531—Wisconsin Medical Journal.

a. STIVER, D. D., 1945.—“Postwar tropical disease problems.” 44 (6), 596–601.

532—Worcestershire Agricultural Chronicle.

a. MILES, H. W. & MILES, M., 1945.—“Potato-root eelworm in Worcestershire.” 13 (2), 129–131, 133, 135.

(532a) Miles & Miles give a short account of the history of potato growing in Worcestershire. Crop rotation has in some cases been very narrow, potatoes being grown in alternate years for periods of up to 50 years. As might be expected, yields have fallen severely and potato root eelworm has become established in some areas. Soil from 60 fields in potato-growing areas was examined and 37 fields were found to be infested with eelworm. Mention is made of the means by which the parasite may be spread, and as no satisfactory direct means of controlling the disease is known, a widening of the rotation is recommended so that potatoes are not grown more often than once every 4 or 5 years. Precautions should also be taken to prevent the distribution of material containing eelworm cysts to clean land.

M.T.F.

533—Year Book. Institute of Inspectors of Stock of New South Wales.

a. YEOMAN, F. T., 1945.—“*Dirofilaria* (heart worm) in dogs.” Year 1945, pp. 67, 69.

(533a) Yeoman gives a popular account of *Dirofilaria* in dogs from the clinical viewpoint, and stresses the importance of fleas as possible additional intermediate hosts [see Brown & Sheldon—Helm. Abs., Vol. IX, No. 36d].

J.W.G.L.

534—Zoologicheski Zhurnal.

a. DUBININ, V. B. & LESHKOVICH, L. I., 1945.—“On the fattening of the marmot (*Marmota sibirica* Radde) and their infestation by ascarids before entering the hibernation.” 24 (6), 373–378. [In Russian: English summary p. 378.]

(534a) Marmots may fail to survive hibernation, owing to the lack of accumulated fat, when they are heavily infected with ascarids. It is possible to predict the population density of marmots during a coming year by a complete study of their parasites and fat.

R.T.L.

NON-PERIODICAL LITERATURE

535—ACKERT, J. E., 1945.—“Laboratory manual of parasitology.” Minneapolis: Burgess Publishing Co., 63 pp. \$1.25.

536—ASH, J. E. & SPITZ, S., 1945.—“Pathology of tropical diseases. An atlas.” Philadelphia & London, x+350 pp.

A section of this very fine atlas is devoted to diagrammatic representations of life-histories of helminths and to reproductions of original photographs and photomicrographs. Brief texts accompany the illustrations.

R.T.L.

537—BAKER, F. C., 1945.—“The molluscan family Planorbidae.” Urbana, xxxvi+530 pp.

*538—BARON, J., 1945.—“D'un nématode parasite de l'appareil respiratoire du chat: *Aelurostrongylus abstrusus*.” Thèse, Alfort.

539—BENBROOK, E. A., 1945.—“List of parasites of domesticated animals in North America.” Minneapolis: Burgess Publishing Co., iii + 44 pp. \$1.25.

540—BLANCHAIS, Y., 1945.—“*Graphidium strigosum*: morphologie, biologie, rôle pathogène.” Thèse, Alfort, 80 pp.

This thesis reviews previous work on *Graphidium strigosum*, the stomach worm of hares and rabbits.

R.T.L.

541—COPPIN, E., 1945.—“*Dicrocoelium lanceolatum* (Rudolphi, 1803). Anatomie, biologie, rôle pathogène.” Thèse, Alfort, 83 pp.

Dicrocoelium lanceolatum [= *D. dendriticum*], often associated with *Fasciola hepatica*, is of frequent occurrence in France and gives rise to severe losses. This thesis recounts its morphology, host and geographical distributions, biology and pathology. The association of *Clostridium oedematiens* with this fluke in the aetiology of “black disease” is important. Repeated treatment with carbon tetrachloride or Fouadin is the remedy suggested. R.T.L.

542—CRAIG, C. F. & FAUST, E. C., 1945.—“Clinical parasitology.” London, 4th edit., 871 pp.

*543—FANTONI, V. J., 1945.—“La eosinofilia en el contenido de los apéndices en las oxiurosis apendiculares.” Rosario, Argentina : Musumarra & Cia, 28 pp.

*544—GREENWAY, D. F., 1945.—“Zooparásitos y zooparasitosis humanas.” Buenos Aires, 6th edit.

545—OPINIONS AND DECLARATIONS RENDERED BY THE INTERNATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE.

INTERNATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE, 1945.—“Opinion 7. On the interpretation of the expression ‘n.g., n.sp.’ under Article 30 (a) of the International Code, as respects generic names published on, or before, 31st December 1930.” 1 (16), 139–146.

Where the expression “n.g., n.sp.” was used on or before December 31, 1930 in publication of a new genus for which no other species was otherwise designated as genotype, it is to be accepted as designation. R.T.L.

546—JOHNSTON, T. H. & MAWSON, P. M., 1945.—“Parasitic nematodes.” Report. British, Australian & New Zealand Antarctic Research Expedition 1929–1931, 5B (2), 73–159.

This report on the nematodes collected by the B.A.N.Z. Antarctic Research Expedition includes the following new species : *Anacanthocheilus australis* n.sp. from *Mustelus antarcticus*, *Contracaecum (Thynnascaris) tasmaniense* n.sp. from *Notopogon lilliei* and *Coelorrhynchus australis*, *C. (T.) nototheniae* n.sp. from *Notothenia rossi* and *N. macrocephala*, *Dacnitis australis* n.sp. from *Notopogon lilliei*, *Stegophorus paradeliae* n.sp. from *Pygoscelis adeliae*, *Ascarophis upeneichthys* n.sp. from *Upeneichthys porosus*, *A. nototheniae* n.sp. from many sub-antarctic and antarctic fishes, particularly *Nototheniiformes*, *A. chalinurae* n.sp. from *Chalinura ferrieri*, *A. lycodichthys* n.sp. from *Lycodichthys antarcticus*, *Rhabdochona coelorrhynchi* n.sp., *Paranisakiopsis australiensis* n.sp. and *Capillaria tasmanica* n.sp. from *Coelorrhynchus australis*, *Capillaria physiculi* n.sp. from *Physiculus barbatus*. A new name, *Stomachinae*, is made for a subfamily of the *Ascaridae*, which includes the species formerly in *Heterocheilidae* and *Acanthocheilidae*, and a key is provided for its genera. *Pseudanisakis Yamaguti*, 1941 is reduced to synonymy with *Anacanthocheilus*. R.T.L.

*547—KISSEL, 1945.—“La phénothiazine, antiparasitaire de choix.” Thèse, Lyon.

*548—LÉPISSIER, H., 1945.—“La stéphanurose porcine.” Thèse, Alfort.

549—LESAFFRE, R., 1945.—“Essais de traitement de la strongylidose des chevaux de pur-sang par la thiodiphénylamine.” Thèse, Alfort, 83 pp.

This thesis deals briefly with the helminth infections of horses as seen in France, especially with the therapy and toxicity of thiodiphénylamine (phenothiazine) and gives data concerning 19 experiments. From these it is concluded that a dose of 1.3 gm. per kg. live-weight is dangerous, that 0.19 gm. per kg. is harmless even when there is anaemia, while 0.05 gm. per kg. is 100% effective against strongylids and about 80% against Ascaris. R.T.L.

550—MATHÉY, M., 1945.—“Traitement de la bronchite vermineuse des bovins par le formal glycérique allylique.” Thèse, Alfort, 67 pp.

Mathey deals with the various aspects of bovine bronchial helminthiasis, which he has studied in Normandy where this disease is prevalent and of economic importance. A simple and

quick technique for intratracheal injection is described. The only effective remedy, in the author's experience, is a new formula comprising 5% of a glycerol ($C_4H_8O_3$) derived from glycerol and formaldehyde, in physiological serum, with 0.01% of allyl isothiocyanate (= allyl-mustard oil), of which 4 to 8 c.c. are injected tracheally 2 or 3 times at intervals of 8 hours. Where bronchitic complications are present, sulphonamide therapy is also given. Nineteen case reports of this method of treatment are recorded.

R.T.L.

*551—PAVLOVSKI, E. N. & BIKHOVSKAYA (PAVLOVSKAYA), I.E., 1945.—[Parasitic worms.] Advances in Biological Sciences in the URSS within the recent 25 years 1917-1942. Symposium, Moscow, pp. 161-175. [In Russian.]

Pavlovski & Bikhovskaya give an extensive summary of the achievements of Russian scientists in the field of helminthology during the period after the October Revolution. The first part of this summary contains the names of the authors, together with the year of completing the work on parasites of Pisces, Reptilia, Aves and Mammalia. In the second part they discuss the achievements in the systematics of Trematoda, Cestoda, Nematoda and Acanthocephala. Most papers dealt with in this summary have been reviewed in Helminthological Abstracts. C.R.

*552—PIFFOUX, B., 1945.—“Parasitisme interne des bovins dans l'Avallonnais” Thèse, Alfort.

*553—PUBLICATIONS. INSTITUT PASTEUR DE LA GUYANE ET DU TERRITOIRE DE L'ININI.

- a. FLOCH, H. & LAJUDIE, P. DE, 1945.—“Trypanosomiasis et filariose humaines d'importation en Guyane française. Taux d'infestation par *A. perstans* chez des tirailleurs sénégalais.” No. 111, 7 pp.
- b. FLOCH, H. & LAJUDIE, P. DE, 1945.—“Sur les bilharzioses en Guyane française.” No. 119, 5 pp.

(553a) 7.5% of 724 Senegalese Infantry serving in French Guiana were found to have microfilariae of *Acanthocheilonema perstans*. No other species of filaria was observed nor did the infected persons show any symptoms attributable to their filarial infection. A European, who had been infected seven years previously in Africa, showed embryos of *A. perstans*, and in another European who had left Africa eight years ago a *Loa loa* occurred.

R.T.L.

(553b) The few cases of bilharziasis, intestinal and vesicular, seen in French Guiana have been imported. So far *Australorbis glabratu*s has not been found. Uninfected specimens of *Tropicorbis kuennianus* have been collected in the neighbourhood of Cayenne.

R.T.L.

554—RACCOLTA DI STUDI E RICERCHE DI PATOLOGIA VETERINARIA, SOMALILAND.

- a. PELLEGRINI, D., 1945.—“Cisticercosi del cammello.” Anni 1942-45, No. 1, pp. 42-48. [English summary p. 48.]
- b. PELLEGRINI, D., 1945.—“Il *Cysticercus dromedarius* nel bovino.” Anni 1942-45, No. 1, pp. 49-52. [English summary p. 52.]

(554a) Pellegrini records a cysticercus which occurred in 23% of the camels examined in Somaliland and provisionally names it *Cysticercus dromedarius* n.sp. after comparing it with *C. cellulosa*e, *C. tenuicollis*, *C. bovis* and *C. ovis*.

R.T.L.

(554b) *Cysticercus dromedarius*, described by Pellegrini as a “provisional” new species [see preceding abstract], is here recorded as a parasite of cattle (0.47%). According to his present observations it is not transmissible to man.

R.T.L.

555—RILEY, W. A., 1945.—“Introduction to the study of animal parasites and parasitism.” Minneapolis: Burgess Publishing Co., 5th revision, iii+87 pp. \$1.50.

*556—SKRYABIN, K. I. & MATEVOSYAN, E. M., 1945.—[Tapeworms—Hymenolepididae—of domestic and game birds.] Moscow, 488 pp.

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In the Author Index there are no cross-references to show joint-authorship, but authors of joint papers are listed individually. Thus, a paper by "Brown, B., Jones, A. & Smith, J." would have three separate entries, "Brown, B.", "Jones, A.", and "Smith, J.".

In the Index of Subjects, alphabetization is under the first word (e.g. "*Acer* sp." before "*Acerina* sp."). Under the generic name of a helminth the following order is observed: papers on the genus as such; papers on undefined species; papers on new and defined species, e.g.

- Capillaria*
- spp.
- *aerophila*
- *amarali* n.sp.

In cross-entries under names of hosts, the specific names of new species of helminths are omitted. *Anthelmintics* are listed under that word and also under the name of the parasite or disease.

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CORRIGENDA

Volume	Serial No.	
XIII	7a	(Abstract) Line 2, for " <i>Cyclocoelium</i> " read " <i>Cyclocoelum</i> "
	112a	(Abstract) Line 2, for " <i>Schistosoma spindalis</i> " read " <i>Schistosoma spindale</i> "
	204d	(Abstract) Line 3, for " can " read " cannot "
	348	(Periodical) Add " und Wiener Tierärztliche Monatsschrift "
	365	(Periodical) For " Technical and Scientific Service " read " Veterinary Service "
	484b	(Title) For " 8, " read " 8 (3), "
XIV	49a	(Abstract) Line 4, for " <i>belengiri</i> n.sp. (also as <i>L. belengeri</i>) " read " <i>belengeri</i> n.sp. (also as <i>L. belengiri</i>) "
	154	(Periodical) For " <i>Suelo Argentina</i> " read " <i>Suelo Argentino</i> "
	255b	(Abstract) Line 6, for " <i>Physaloptera bluntschlii</i> " read " <i>Physaloptera bluntschlii</i> "